

*Carnegie Corporation
of New York*

Annual Report 1990





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⁵ As of November 19, 1990

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Report of the President



A Decent Start: Promoting Healthy Child Development in the First Three Years of Life

Over extended years of growth and development, the human child experiences a prolonged period of immaturity and vulnerability — the longest of any known species. Much has to be acquired, much mastered, much tried and found wanting, much discovered and put to use. Overwhelmingly, this learning time is spent in close relationship with adults who offer nurturing love, protection, guidance, stimulation, and support. Coping abilities are acquired in a social context, largely through the sequence of observation, imitation, and practice as well as of exploration and discovery. Initially, a child depends almost entirely on the mother or other primary caregiver. After infancy, the child increasingly interacts with other relatives, with peers, and with some unrelated adults of the social group. This is the path our species has followed in becoming human over many millennia.

The first three years of life have always been crucial in human adaptation. They provide the fundamental elements for learning about the self, about others, about the wider world, about ways to cope with and solve the problems of living — all one needs to know to survive and flourish. Such adaptations, to be achieved successfully, must take place in the context of a secure attachment to a caring adult. An adult who is responsive to an infant's signals provides a safe base from which the child can explore the larger social and physical world. Exploration in turn facilitates cognitive development and friendly relations with other adults and peers.

These, then, are conditions that are conducive to meeting the basic requirements of healthy child development:

- 1) an intact, cohesive, nuclear family, dependable in the crunch;

Note: The president's annual essay is a personal statement representing his own views. It does not necessarily reflect the foundation's policies. The views expressed here are more fully developed in a forthcoming book by David A. Hamburg, to be published by Times Books, Random House, in 1992.

- 2) a relationship with at least one parent or surrogate who is consistently nurturing and loving;
- 3) easy access to supportive family members;
- 4) a supportive community, whether it be a neighborhood, religious, ethnic, political group, or other large group beyond the family that is helpful; and,
- 5) some measure of predictability about the adult environment that permits gradual preparation to cope with it and take advantage of its real opportunities.

THE PREDICAMENT OF TODAY'S CHILDREN

Most of our ancestors lived in contexts of very slow technological and social change. The family was the main locus for education — for economic and social activity, for mutual aid and preparation for adult life. There were many opportunities for children gradually to acquire adult skills and roles.

With the advent of the Industrial Revolution, however, the rate of innovation in Western Europe took off, creating profound transformations in the organization of economic, political, and social life, with psychological and other ramifications that continue to the present day. The ancient and powerful motivation of parents to do well by their children now occurs in a setting quite different from any that our ancestral parents knew. The mutual aid ethic, once a powerful reinforcement of family ties, is considerably weaker. The family has been pulled apart. Americans in 1991 are far more likely than in earlier times to postpone marriage, to bypass marriage altogether, to live alone, to end marriage by divorce, to work outside the home when their children are young, or to head a single-parent household (typically with no male present and very often no other adult person).

The change in regular patterns of contact between children and their adult relatives is remarkable. Not only are mothers home much less, there is little if any evidence that fathers are increasing their time with children. Only about 5 percent of American children see a grandparent regularly. The high mobility of families and the erosion of strong neighborhoods and other social supports have also taken their toll on the security and predictability of childhood.

In modern society, many parents are not able to provide the essential conditions for the healthy development of their children in the early years. The tragedies begin before birth, as some mothers fail to receive adequate prenatal care. Although our technical capacity to promote healthy births is greater than ever before, and the choices seem richer, parents too often lack access to resources, or they do not know how to obtain them. Most families depend on some version of child care, yet they have little guidance or ability to monitor the quality of that care. Arrangements are often erratic or otherwise unsatisfactory — frequently absent altogether. Unfortunately, to the extent that children are left to their own devices in growing up, dependent on television and immature peer relations, they are not likely to fare well. At the extreme, children who are badly neglected are unlikely to learn to care for others or build a constructive life.

Young people, in fact, are coming toward parenthood with less experience in the care of children than their predecessors had and with seemingly less control over the forces that shape their children's development. While much concern has been expressed for the families of very poor children, the difficulties have also grown to encompass the affluent sectors as the great social transformations under way have enveloped even them.

Such drastic changes in the structure and function of American families are posing a serious challenge for the well-being of children. Growing rates of child abuse and overt neglect are only the tip of the iceberg: we may be on the verge of an epidemic of *inadvertent* child neglect on a scale large enough to put the future of our society in jeopardy.

Most parents are deeply concerned about finding ways to ensure that their children grow up intact in this rapidly changing world. But if they cannot manage to do all that is necessary, how can they be strengthened in their vital growth-fostering role? What does it take to ensure that children grow up healthy and vigorous, inquiring and problem-solving, decent and constructive? What extra-familial influences can help to meet the developmental requirements of children? Can we illuminate a developmental sequence of experiences fostering healthy child development and ways to accomplish this sequence under contemporary American conditions? What motivation, information, skills, and professional services are highly beneficial? Is there a strong scientific and professional consensus on these questions?

What follows is a concise sketch of opportunities, experiences, interventions, and services that bear strongly upon healthy, constructive development in the first few years of life. Broad action on these fronts is well within the existing capability of many communities and could assure a solid foundation for healthy development.

MEETING THE ESSENTIAL REQUIREMENTS OF HEALTHY GROWTH AND DEVELOPMENT

Prenatal care

In the 1980s a series of integrative reports on the health of America's children emphasized the importance of prenatal care. The latest of these, based on a study conducted by the National Institutes of Health on behalf of the United States Public Health Service,¹ presents an important synthesis of the best available knowledge.

The report covers medical care, education, and social support services. At the heart of its inquiry are the essential medical practices that are needed, based on findings from biomedical research and clinical experience.

¹*Caring for Our Future: The Content of Prenatal Care*. Report of the Public Health Service Expert Panel on the Content of Prenatal Care, Public Health Service, U.S. Department of Health and Human Services. Washington, D.C.: Public Health Service, U.S. Department of Health and Human Services, 1989.

The broad objectives of prenatal care, as outlined in the report, are to promote the health and well-being of the pregnant woman, the infant, and the family up to one year after the infant's birth. Four aspects of prenatal care are considered essential: early and continuing risk assessment; health promotion; psychosocial and medical interventions; and follow-up.

Education for health should begin with the prospective mother, before a child is even conceived. In most cases, to bear a healthy baby, a woman must have been healthy in the first weeks of pregnancy, often before obstetrical care has begun. That is one reason why planning a pregnancy is important. This orientation points especially to the need for inculcating healthy practices in young adolescents when sexual activity is beginning. As it is, pregnancy is often occurring without anything remotely like adequate preparation. Schools can educate the young in the life sciences, in the importance of prenatal care, and in parenting as well as provide a wider sense of life choices for disadvantaged young women.

Once a young woman becomes pregnant, early and continuing risk assessment by the prenatal care provider is important. The elements of risk assessment include taking a complete history, a physical examination, laboratory tests, and assessment of fetal growth and wellness. The specific content and timing of prenatal care should depend on the risk status of the woman and her fetus. It is essential that risk assessment continue throughout pregnancy, because risk status may change. Generally more frequent visits to the provider need to be made early in pregnancy so that needs can be identified and interventions begun, including referrals to other physicians as needed.

Beyond the traditional medical concerns of preventing sickness and death of the developing fetus and mother, the prenatal care providers should educate future parents in healthful behaviors, family planning, general knowledge of pregnancy and parenting, positive family relationships, and child development as well as care of the newborn. Interventions at this stage include not only the treatment of illness but the modification of unhealthy behaviors. There is broad consensus that pregnant women *must* be informed about the risks to the fetus of smoking, alcohol consumption, and cocaine use — and helped to stop using these substances. Women with little formal education tend to be the heaviest smokers. Often they have scant knowledge about their own bodies. Yet pregnant women are highly motivated to understand aspects of physiology, nutrition, exercise, and stress that affect their own health and the baby's. Potential parents, moreover, need to be aware of serious hazards in the home, work, and other environments that can affect pregnancy outcomes. The prenatal period also provides an opportunity to identify the social and financial resources necessary for the further healthy development of mother and infant beyond pregnancy and delivery.

Those prenatal care providers regularly serving women at psychosocial risk should have a core set of services available within their practices. These services should cover psychological counseling, social work, public health nursing, nutrition, and health education in addition to the traditional primary care medical skills. Core services in a psychosocial risk program should include home visits, which have been shown to be effective in promoting many of the objectives of prenatal care; case management; and services to facilitate access to care, including

financial, transportation, and child care assistance. These services should promote early entry into care and facilitate assessment of the family environment. Waiting time prior to initial entry to care should be minimized, and the schedule of visits should meet women's needs through evening and weekend hours if necessary.

The educational component of prenatal care can be expanded to include a constructive examination of options over the course of life. For women at highest risk — who are poor, uneducated, or very young — the prospects for a positive change in life associated with the birth of a baby may provide the impetus to make other life changes. The desire to do well for their children can lead parents to job training, formal schooling, or other education likely to improve their families' prospects. Such life-enhancement activities may in the long run lead to improved outcomes for later children and perhaps even grandchildren.

For many women, particularly those at high risk for socioeconomic reasons, medical care and education need to be supplemented with social support. This involves a set of personal contacts through which the individual receives emotional support, material aid and services, information, and new contacts. It is difficult enough to teach a woman about nutrition if she does not have any money or access to food. If she uses or abuses drugs, this complicates matters considerably. To cope with such problems, social support for education and health can be organized as a systematic intervention, often involving community-based paraprofessionals.

Primary health care in the first few years

In 1989 a distinguished national group of health leaders surveyed the prospects for children's health in the City of New York, which offers a prototype of urban health problems across the land. The report of the Mayor's Commission on the Future of Child Health² in New York City describes the nature and scope of the health problems, effective models for coping with these problems, and useful steps to be taken in the 1990s to the end of the decade.

Key among the attributes of an effective, attainable child health system, according to the report, are the following:

- 1) the ability to link a pregnant woman with early, high-quality prenatal care and to register the child with a physician, preferably before the child is born;
- 2) assurance for every child of a continuing relationship with a physician or nurse practitioner who can provide complete primary care and who knows the child, the child's family, and the family background;
- 3) assurance of ready access to secondary and tertiary levels of care for complicated health problems; and,
- 4) the existence of community supports such as mental health services, day care, parenting education, family planning, and substance abuse programs — with convenient access through primary care to all these services.

²New York City Department of Health. *The Future of Child Health in New York City*. A report of the Mayor's Commission. New York: New York City Department of Health, August 1989.

Ideally, the mother's first contact with a pediatrician begins before the child is born. The doctor can then help reinforce her understanding of the risks to the fetus of alcohol, tobacco, and drug use and discuss the benefits for the infant of breastfeeding. Immediately after delivery, the child's health status needs to be evaluated and the findings communicated to the parents. The attachment between mother and baby is fostered, and steps are taken to prepare her to cope with difficult episodes.

The most effective preventive intervention for health in infancy is immunization against the common infections of childhood. Most school-age children, largely because of mandatory immunization for school entry, are fully protected. Many preschool children are not, however. Less than half the number of poor and minority children under age four are fully vaccinated against preventable infections. One consequence of this in 1990 was a serious resurgence of measles.

In addition to immunizing children during infancy, pediatricians need to monitor the growth of infants. Growth monitoring can readily detect nutritional problems, as the United Nations Children's Fund has shown in very poor developing countries throughout the world. In this era of antibiotics, pediatricians can control infectious diseases before they do much harm — in marked contrast to the casualties of only a few decades ago. The prevention of injuries, the leading cause of death and disability among young children, must also be discussed with parents.

Pediatricians need to go beyond these medical interventions to provide well-informed guidance and emotional support, directing families toward healthy patterns of living, answering and anticipating questions about growth and development.

As the infant becomes a toddler, preventive care can help parents know what to expect. Many parents do not understand, for example, that the sometimes difficult behavior of a toddler most often reflects the acquisition of important skills. Other developmental needs of a child can be addressed, such as having a play area safe for exploration. The transition to out-of-home care and preschool education is also a suitable subject for preventive pediatrics.

Pediatricians are often in short supply, particularly in poor city neighborhoods and remote rural areas. To extend their reach they need to find ways of working effectively with pediatric nurse practitioners, home visitors, parent support group facilitators, and public health facilities. Models of such a system of outreach already exist and could be built upon to serve all the nation's children.

Child care in the first few years

In 1990 the National Research Council of the National Academy of Sciences published a comprehensive report on child care.³ Prepared by a broad-based group of

³Hayes, C.D.; Palmer, J.L.; and Zaslow, M.J., eds. *Who Cares for America's Children: Child Care Policy for the 1990s*. Panel on Child Care Policy, Committee on Child Development Research and Public Policy, Commission on Behavioral and Social Sciences and Education. Washington, D.C.: National Academy Press, 1990.

experts and subject to scientific review for the highest standards of accuracy, this report gives a penetrating assessment of needs and opportunities for the 1990s.

The panel identified three overarching goals for an improved child care system: better quality, greater accessibility for all families, and enhanced affordability for low- and moderate-income families.

The most urgent needs are for organized programs for infants and toddlers, before- and after-school programs for the nation's estimated 2.1 million latchkey children, child care and preschool programs for children with disabilities, and comprehensive child development programs for economically disadvantaged children.

The panel reached seven general conclusions:

- 1) Existing child care services in the United States are inadequate to meet current and likely future needs of children, parents, and society as a whole;
- 2) a large number of children are now cared for in settings that neither protect their health nor offer appropriate developmental stimulation;
- 3) child care has become a necessity for the majority of American families irrespective of family income;
- 4) arranging quality child care can be difficult, stressful, and time-consuming, especially for low-income families; public policies therefore should give priority to the economically disadvantaged;
- 5) there is no single policy or program that can address the child care needs of all families and children;
- 6) responsibility for meeting the nation's child care needs should be widely shared among individuals, families, voluntary organizations, employers, communities, and all levels of government; and,
- 7) child care policies should affirm and support the role and responsibilities of families in childrearing.

One of the more important findings from research in this field is that the children from relatively poor families stand to gain more than advantaged children from their experience in child care centers, when the offerings are of high quality. The stimulating and supportive experience often opens doors for children whose family settings are inadequate.

Research findings of beneficial effects beginning with preschool and carrying over into the early elementary school years naturally stir curiosity about what constitutes high quality in child care. Can we extract the essential ingredients and heighten the efficiency with which the information is communicated — especially to parents who must choose among the available possibilities?

Overall, the best results for children's intellectual and social development are associated with centers that balance educational and playful activities, that provide uncrowded environments containing a variety of play materials, and that provide many different learning opportunities. The best results are also obtained with

small groups of children of both sexes who are not more than two years apart in age. Such settings promote cooperation, sharing, friendships between children, and a good relationship with the caregiver.

The caregiver is the crucial element in child care quality. Within fairly broad limits the ratio of children to caregivers is not as important as the behavior of the caregiver over time. Teachers who are actively involved with the children, who provide interesting materials, are sensitive and responsive to children's initiatives and interests, and combine encouragement with concrete suggestions tailored to the individual child meet the criteria of professionalism. Professionalism also incorporates staff training, explicit standards as to what constitutes care of high quality, and participation in a network of staff activities for mutual aid. With additional research on these issues, it will be increasingly possible to sharpen the criteria for high-quality child care and to find ways of meeting these criteria across a diversity of settings.

As more and more young mothers enter the full-time paid work force, they are inclined to place their infants in out-of-home day care. Studies that have examined excellent child care arrangements find that it is certainly possible for infant development to proceed in a healthy way under such conditions. Infants from a background of neglect who are placed in child care under favorable conditions have been shown to adapt more quickly and to explore more fully an unfamiliar environment. They tend to be more ready to play with peers, appear more confident in social situations, and are less fearful of unfamiliar adults.

Some recent studies of less-than-excellent child care, however, have found that infants placed in unstable and patchwork child care arrangements have difficulty forming secure attachments with their parents. Some scholars in this field doubt whether current day care options can provide adequate conditions for children in the first year of life. At present they would prefer that day care be deferred beyond infancy.

All this suggests a great need for more differentiated assessment of child care practices, including their quality, timing, relation to home environments, and kind and amount of parental participation. As a practical matter, in the absence of widespread policies of maternal and paternal leave, the trend is toward increasing infant day care. Clinicians and researchers therefore are working to develop effective modes and standards of dependable day care consistent with the promotion of normal, vigorous child development. Whatever the infant care arrangements may be, a child needs to have a continuing, unbroken relationship with at least one caregiver through infancy and into the childhood years.

Building parental competence

During the past two decades there has been an upsurge of innovation and assessment focusing on ways to strengthen the earliest building blocks of development, especially for poor children of young mothers. These interventions, some of which have been named, have aimed at enhancing the parents' capability in childrearing and providing constructive stimulation for the baby. They involve several patterns of organization: parent education; infant stimulation and support; home visitors;

nutrition education and supplementation; primary health care for mother and child; links to community services; and social support networks for young parents under stress. Such combined efforts occur in schools, day care centers, hospitals, health centers, and churches. They are conducted by people with diverse professional and paraprofessional backgrounds.

Home visiting services are often indigenous to the community. They engage child and mother in organized activities appropriate to the child's phase of development. Parent-child centers, similarly located, bring in the infants and parents for parent education and infant stimulation. The main thrust in both is to teach young mothers how to become effective teachers of their own children and to develop mutually beneficial mother-child relationships. Child and family resource programs provide services at the home and at a center, depending on the problem at hand. They deal more broadly with the health, education, and counseling of families with children from infancy to school age.

All these programs offer information on child development, activities to foster parent-child interaction, opportunities for parents to explore their concerns, and help with the problems of living. They build coping skills and connect parents with community resources that can strengthen family capability to maintain health and good nutritional habits, to find shelter, clothing, training, and employment.

Most community-based early intervention programs throughout the nation have been innovative attempts to respond to rather urgently felt needs. They have been straightforward service programs incorporating little or no evaluative research. Systematic assessment has been conducted on a few programs, however, which compare participating and control families from similar backgrounds. These latter are the most informative for our present purpose, although judicious reflection on the rich experience of unevaluated programs can also be useful.

The evidence to date indicates that community-based early intervention can beneficially affect a range of relevant outcomes including the personal development of young parents; their ability to use available community resources; the attitudes and behavior of young parents toward their children; and the healthy development of children. While the effects are not massive, they are constructive and fairly consistent. The strongest effects on parenting skills and knowledge — with at least moderately beneficial effects on child development — seem to come from programs that emphasize parenting skills in a deliberate and systematic way. Such interventions tend to have significant professional involvement in the program, even though much of the operation may rely on paraprofessionals.

Multiple services through home visiting

Home visiting can be a relatively efficient and effective way of addressing the multiple needs of poor families with young children. Competently performed, home visits provide an opportunity for one or two workers to engage family members in solving problems of housing, food, health, childrearing, child development, and family relationships. Researchers and policymakers are also beginning to see home visiting as a way to prevent premature birth, child abuse and neglect, and school failure.

Home visits afford the opportunity to instruct and motivate mothers, listen to them, observe them interacting with their children and other family members, and support them in their role as their children's primary caregiver and first teacher. Typically, a particular program uses home visits to tackle more than one problem.

Two rationales for providing such services on a regular basis to families are common: the parent is physically homebound, lacking a ready means of transportation, living in a rural area, or staying at home to care for a handicapped family member or several young children; or the parent is psychologically homebound, lacking social support and self-confidence, perhaps too depressed or preoccupied with family problems to keep appointments. Home visits may also be an effective way to provide services on a temporary basis — during a family crisis or other particularly stressful period. Examples of such crises include a pregnant, low-income mother with medical complications; the arrival at home of a frail premature baby; and the imminent threat of foster care placement.

Home visits can be an effective way to teach parenting skills to high-risk families who suffer from multiple stresses and even clinical depression. Such families are the least likely to come to health clinics for prenatal care or well-baby checkups, to participate in parent education classes, to attend parent support groups, or to seek quality preschool programs for their children. They are at relatively higher risk of abusing or neglecting their children.

Research evaluations of home visiting programs show positive effects on health and well-being, especially for adolescent mothers and their families, low-income families, and rural families. Outcomes include lower rates of small-for-gestational-age and low-birthweight babies, better health at birth, fewer accidents in the first year of life, higher rates of immunization, lower reported incidence of child abuse and neglect, and improvements in cognitive performance. Benefits can persist over time, as demonstrated by the Perry Preschool Program in Michigan and the Yale Child Welfare Research Program, both of which included considerable home visiting.

Program effectiveness is related to certain key features of program design. These features include clear and realistic objectives with articulated programs and expected outcomes; a well-defined target population with identified service needs; a plan of structured services designed specifically for the target population, having defined activities with a sequenced plan for instruction; trained visitors with skills that match the program's objectives; supervision and support for visitors; links to other community services; a supportive parent agency; systematic evaluation to document program process and outcomes; and ongoing funding.

CHALLENGES FOR IMPLEMENTATION

No single intervention is a panacea, but many are useful and their articulation is important, especially in spanning the main years of growth and development during childhood and adolescence. Valuable ingredients of such a continuum in the earliest years are enriched prenatal care, preventive pediatric care in infancy, high-quality day care, parent education, social supports, and preschool education.

A number of issues must be addressed in implementing or expanding such interventions. How can we translate scholarly research into practice? Do we need a new institution for young children, or can we expand services for young children by building on existing institutions such as schools, the health care system, and community agencies? How can we better coordinate services that are now fragmented across different bureaucracies? How can professionals with different training and cultures learn to cooperate to serve families?

In principle, the fundamental point of entry for interventions that could be helpful in the crucially formative first few years of life would be early prenatal care for both parents. This means not only preparation for pregnancy, labor, and delivery, but also preparation for parenting and indeed for further life choices. Such an approach implies a combined health, parent education, and early childhood center.

A promising trend at present is for agencies to coordinate their services in a way that makes sense to people who most need them. If services that are now fragmented can be brought together in one accessible site, fine. If not, then all relevant, practical *information* about children's services and opportunities needs to be brought into one visible, attractive site. In either case, young children and their parents usually need guidance in mapping the territory — figuring out how to get the help they need. Case managers are a response to this problem, a way of coping with the all-too-often bewildering array of locations, procedures, forms, strange terms, and not-so-friendly people.

It should be possible in the foreseeable future to design interventions that go beyond what has been possible up to now. There are several bases for this optimistic view. First, we can utilize the experience of interventions so far undertaken. Second, we can draw out the implications for intervention strategies of child development, child health, and educational research. These bodies of knowledge and experience can help us construct informed models for intervention. In doing so, we must centrally ask questions of effectiveness. What works? What is worth doing? If terrible suffering can be relieved, if grievous loss of talent and life can be corrected, then surely ways can be found to make the necessary interventions feasible.

It is a great challenge for foundations to stimulate this transformation. At the end of 1990, Carnegie Corporation decided to undertake a new initiative — building on its substantial experience in this field — to achieve a broad, science-based understanding of ways in which healthy child development in the first three years can be fostered under today's circumstances. The centerpiece of this effort will be a Carnegie report, prepared by a distinguished group of leaders in a variety of sectors. The report will clarify the essential requirements for healthy early child development and the principal opportunities for meeting these requirements. Our aim will be to illuminate a developmental sequence of experiences likely to achieve good outcomes and ways of accomplishing this sequence under contemporary American conditions.

We cannot lose sight of the fact that wise investment in human capital is the most fundamental and productive investment any society can make. Constructive development of our people is more important than oil or minerals, office buildings

or factories, roads or weapons. The central fact is that all of these and much more depend in the long run on the quality of human resources and the decency of human relations. If these deteriorate, all else declines. So the developmental sequence of opportunities in education, health, and the social environment sketched here have a direct bearing on the kind of future we will have.

David A. Hamburg
President

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Report on Program



Grants and Appropriations

Carnegie Corporation of New York is a philanthropic foundation that was created by Andrew Carnegie in 1911 to “promote the advancement and diffusion of knowledge and understanding among the people of the United States.” Subsequently, its charter was amended to permit the use of funds for the same purposes in certain countries that are or have been members of the British overseas Commonwealth. Its total assets at market value were about \$829 million as of September 30, 1990.

During the year ended September 30, the trustees approved 315 grants and appropriations, amounting to a total of \$44,757,286. There were 312 grants, including 94 to schools, colleges, and universities and 218 to other organizations. Three appropriations were made for projects administered by the officers.

Carnegie Corporation grants are made for purposes that are broadly educational in nature, but they need not be limited to the formal educational system or to educational institutions. The foundation makes it a policy to select a few areas in which to concentrate its grants over a period of years. Currently the grant programs fall into four broad areas. The first is Toward Healthy Child Development: The Prevention of Damage to Children. The second is Education: Science, Technology, and the Economy.* The third program area is Strengthening Human Resources in Developing Countries. The fourth is Avoiding Nuclear War.** Grants that do not fit easily into these categories are listed in Special Projects. The following pages describe the major grants made during the year. Grants of \$25,000 or less are listed at the end of each subcategory with a brief statement of purpose.

There is no formal procedure for submitting a proposal. Anyone seeking support for a project with one of the goals stated above should submit a brief statement describing the project’s aims, methods, personnel, and the amount of financial support required.

On the basis of this preliminary statement, officers will review the proposal in light of their knowledge of the field and in relation to the Corporation’s current program priorities. If they decide to evaluate the project for funding, they will request a more developed project proposal. Normally, it would have the following elements: the purpose, goals, work plan, duration of each phase, personnel required, detailed budget, amount requested, sources of funds, *curriculum vitae* of key personnel, and an executive summary. Before a grant could be made, additional materials would be required, including a formal request from the head of the institution. The foundation does not operate scholarship, fellowship, or travel grant programs; nor does it make grants for basic operating expenses, endowments, or facilities of educational or human service institutions.

*In fiscal year 1991 these two programs will be combined into one. The new program will be called *Education and Healthy Development of Children and Youth*.

**The program in fiscal year 1991 will be renamed *Cooperative Security*.

Toward Healthy Child Development: The Prevention of Damage to Children

Although the majority of American children grow up to be strong and capable adults, substantial numbers of children and adolescents encounter serious problems along the way that affect their survival or leave their entire lives warped or unfulfilled. The foundation's program, *Toward Healthy Child Development: The Prevention of Damage to Children*, focuses on four of the major kinds of serious harm to children and young adolescents: school failure, school-age pregnancy, childhood injury, and substance abuse. In two of these areas — school failure and school-age pregnancy — the Corporation funds unsolicited proposals. In the other two — childhood injury and substance abuse — it only initiates projects.

The foundation's interest in the prevention of school failure encompasses a variety of approaches, including efforts to expand preschool education and family support programs in low-income communities; to improve achievement in junior high schools and reduce school dropout; and to monitor and strengthen policies and programs that upgrade the education of minority students.

The childbearing rate of American teenagers is one of the highest in the industrialized world. Given the Corporation's limited resources and the fact that there are already a number of programs to prevent or delay repeat pregnancies among school-age girls, the Corporation is concentrating on efforts to prevent the first pregnancy among young adolescents. It funds the development and testing of a variety of intervention programs designed to help girls and boys develop responsible sexual attitudes and behavior and a clearer sense of alternative futures to early parenthood. Projects supported are variously exploring the roles of peers, parents, schools, community-based organizations, and the media.

Finally, in recognition of the range of serious problems encountered by many adolescents from all social groups, the Corporation has created the Carnegie Council on Adolescent Development. Its purpose is to generate public and private interest in measures that prevent seriously damaging problems in adolescence and to promote healthier adolescent development. Based in Washington, D.C., the council has a membership of twenty-six leaders from the fields of science, law, business, government, the media, health, religion, education, and youth-serving agencies. It has developed activities concerned with the education and health of adolescents, begun to work with representatives of the media on adolescent problems, and initiated an investigation of promising preventive interventions and a synthesis of basic research on adolescence. Its first report, *Turning Points*, was issued in June 1989, and its recommendations have become the focus of much of the Corporation's grantmaking in this area.

National League of Cities Institute

\$400,000

The National League of Cities recently established an institute to help city officials and municipal organizations offer affordable, high-quality child care, improve public school education, and design long-range, comprehensive plans for meeting the needs of urban children and their families. Under this twenty-seven-month grant, the institute, which is directed by John E. Kyle, is sending consultants to a number of American cities to provide technical assistance to officials ready to work toward these goals. The institute hosts regional roundtable discussions for city officials to discuss measures that can be taken on the local level and is also producing a series of reports on city government's role in strategic planning for child care and improved education, which will be widely disseminated among policymakers. The institute plans to hold a national conference on urban child and family issues. Additionally, it will provide information about municipal programs to other organizations concerned with children's welfare.

National Conference of State Legislatures

\$300,000

Longitudinal studies indicate that preschool education can help promote academic achievement and prevent school failure among children from low-income families. For several years the National Conference of State Legislatures' Child Care/Early Childhood Education Project, directed by Shelley L. Smith, has provided state legislators research-based information about quality child care and early childhood education programs in their states. This effort has been aided under two previous Corporation grants, enabling project staff members to hold workshops and conferences on child care and early childhood education, produce several publications on the subjects for state legislators and their staffs, and assist twelve states in establishing preschool programs. This grant continues the Corporation's support for another two years. The information and technical assistance offered by the project is especially important now that states are working to implement the Family Support Act, passed by Congress in 1988. As a result of the act, states will have to make a number of decisions about ways to ensure the quality of care given to children of parents who participate in federally mandated work training programs.

Yale University

\$171,700

Young children — especially those from low-income families — often receive inadequate education, health, and social services. Since federal and state budgets for these services are not likely to increase appreciably in the near future, existing services must better coordinate their efforts to address the full range of children's needs. A 1989 Corporation grant funded a preliminary survey of approximately 300 collaborative efforts by the Bush Center in Child Development and Social Policy at Yale University. These collaborations were diverse, ranging from state interagency councils to combined efforts by schools and community organizations

to address a single issue, such as preschool education or the training of adolescent mothers of young children. Of those programs, seventy-four were found to be effective enough to warrant further investigation. Under this one-year grant, Sharon Lynn Kagan is directing a detailed study of eight of the programs, which have been selected for their success and for their diversity in scope, populations served, and geographical distribution. Kagan and her associates are visiting each site and conducting extensive interviews for a series of briefing papers for policymakers. They will also prepare a “what works” handbook for practitioners and a book integrating the study’s findings with those of other researchers in the field.

Avance-San Antonio

\$142,000

Avance-San Antonio was founded by Gloria G. Rodriguez in 1973 as a parent-child education program for low-income Hispanic families. While parents are given information on child development and participate in English-language training and other adult education activities, their children are enrolled in a model child-care program staffed by former Avance parent participants, local teacher trainees, and Avance personnel. In order to improve its services and strengthen the case for similar programs in other parts of the country, Avance undertook a three-and-a-half-year evaluation of its program, beginning in 1988. An experimental group of 480 low-income Mexican American mothers of preschool-age children that receives Avance assistance is being compared against a control group that does not. The “experimental” mothers attend weekly classes on child development, education, and family life. They also participate and observe in the day-care center, receive home visits, and take special field trips with the Avance staff. Avance expects that these interventions will produce measurable improvements in the home environment, parent-child interaction, child behavior, and mothers’ knowledge, skills, attitudes, and utilization of community resources. Dale L. Johnson, professor of psychology at the University of Houston, is supervising the bilingual researchers conducting the evaluation. This one-year grant supplements a previous Corporation grant in support of the evaluation.

Child Care Employee Project

\$56,000

The Child Care Employee Project recently completed the National Child Care Staffing Study, the first comprehensive study of the nation’s child care workforce to be conducted in more than ten years. Results of the study, conducted in 227 child-care centers in Atlanta, Boston, Detroit, Phoenix, and Seattle, are alarming. In most cases, the care was found to be barely adequate and the workers insufficiently trained. The rate of staff turnover in day-care centers has almost tripled since 1977, from 15 percent to 41 percent, and average wages since 1977 have decreased by 20 percent. This nine-month grant funded dissemination of the study’s results to the media, members of Congress, state policymakers, business leaders, and other decision makers. It also enabled project staff to create a speakers bureau to provide experts to meetings of professional, union, business, and wom-

en’s organizations and policymakers and researchers. The study’s principal investigators were Marcy Whitebrook, executive director of the Child Care Employee Project; Deborah A. Phillips, assistant professor of psychology at the University of Virginia; and Carollee Howes, associate professor of education at the University of California, Los Angeles.

Discretionary grants

<i>National Council of Jewish Women</i> , for planning an assessment of the Home Instruction Program for Preschool Youngsters	\$25,000
<i>University of Chicago</i> , for a planning meeting for a study of the program of the Center for Successful Child Development for early intervention and child development in an inner-city context	\$21,000
<i>National Head Start Association</i> , for dissemination of a report on the future of the Head Start program	\$8,000

School failure

Mexican American Legal Defense and Educational Fund **\$750,000**

The Mexican American Legal Defense and Educational Fund (MALDEF) was founded in 1968 to fight discrimination against Hispanics in employment, education, access to higher education, political participation, and immigration policies. Since 1974 the Corporation has contributed to MALDEF’s program in education. The current three-year grant is allowing MALDEF to continue its advocacy and litigation efforts on behalf of Hispanic students in four main areas. MALDEF is working to eliminate language barriers for students whose English proficiency is limited and promoting reforms in standardized testing, on which minority children tend to score lower than do their white counterparts. It also initiates litigation against state and local school systems that do not equitably distribute their resources, and it monitors the progress of school desegregation cases brought to court by others. In addition, MALDEF operates the Parent Leadership Program to help Hispanic parents become more effective advocates for their children at school. Antonia Hernandez is the president and general counsel of MALDEF, and Norma V. Cantu directs the Education Litigation Program.

NAACP Legal Defense and Educational Fund **\$555,000**

Since its founding in 1940, the NAACP Legal Defense and Educational Fund (LDF) has worked to combat racial discrimination in education, employment, housing, voting, and the administration of justice. Corporation support for the fund has totaled almost three million dollars in the past two decades. With this three-year grant, the LDF’s Education Litigation Program, directed by attorney Julius L.

Chambers, is monitoring school districts where a desegregation order is in place, protecting against resegregation in other districts, challenging school finance inequities, and pursuing desegregation and other relevant issues at the collegiate level, where the proportion of black and Hispanic students entering college declined by 25 percent from 1976 to 1985 and where only 43 percent of blacks who enter as freshmen graduate. The LDF has been involved in more than 400 desegregation lawsuits, about half of which are still pending. Its work is especially important in light of a recent decision by the U.S. Department of Justice to allow school districts to attempt to dismiss existing desegregation orders. These efforts remain the cornerstone of the fund's efforts to improve the quality of education for minority children.

California Department of Education

\$425,000

The California Department of Education recently launched a three-year pilot program aimed at improving the quality of middle grade schools. The program, the largest of its kind in the United States, is based on recommendations contained in *Caught in the Middle*, the 1987 report of a statewide task force on education in middle schools. *Caught in the Middle* calls for changes in middle school curricula, instructional practices, academic counseling, school organization, and testing and assessment as well as the provision of expanded health services and professional preparation. The department of education's program involves ten regional networks of ten schools each, working in collaboration with local college faculty and with health and other community agencies. A 1988 Corporation grant helped get the project under way, and this grant continues support for another two years. Researchers are conducting site visits to determine the general efficacy and larger applicability of the program. At the project's end, the department of education will communicate its experiences to other middle grade schools throughout California and disseminate results of the reform effort nationally. Additional funding for the project is provided by individual California school districts, the department of education, and various universities.

Discretionary grants

Public Education Association, for research on high school reform in New York City

\$25,000

Adolescent pregnancy

Meharry Medical College

\$500,000

Meharry Medical College has trained approximately 40 percent of all black physicians and dentists practicing in the United States today. In 1987, Meharry used Corporation support to begin a model program for preventing pregnancy among high-risk black adolescents. Titled "I Have a Future," the program attempts to

motivate both male and female adolescents to avoid pregnancy and to adopt positive lifestyles. It offers comprehensive medical services; computer-based education that promotes literacy while teaching health and personal responsibility; social, athletic, and recreational activities partly organized by the teenagers themselves; and parent education. The program is targeted to nearly 800 adolescents living in two low-income housing projects in Nashville, Tennessee. Their actions are being compared to those of a control group of adolescents from two similar housing projects in the general vicinity. This grant continues the Corporation's support for another two years. Other funds have been provided by comedian Bill Cosby and Camille Cosby and the William T. Grant and William and Flora Hewlett foundations. Henry W. Foster, Jr., chair of the Department of Obstetrics and Gynecology at Meharry, directs the program.

Council of State Governments

\$329,000

Alarmed by the high rate of infant mortality in the southern region of the United States, the Southern Governors' Association and the Southern Legislative Conference, both of which operate under the umbrella of the Council of State Governments, formed the Southern Regional Task Force on Infant Mortality in 1984. Early studies by the task force indicated that a large percentage of babies with health problems are born to southern girls age seventeen and under, who are least likely to seek or receive prenatal care. Previous Corporation grants have enabled the task force to publish and disseminate two influential reports: *Adolescent Pregnancy in the South*, which details the incidence and cost of adolescent childbearing, and *Adolescent Pregnancy in the South: Breaking the Cycle*, a body of recommendations for reforms in education, employment, and health services. With this two-year grant, the task force, under the leadership of Governor Ray Mabus of Mississippi, is establishing a permanent southern center on adolescent pregnancy prevention. The center will hold briefings and publish papers on the subject for governors, legislators, and their staffs. It will also monitor public and private spending on adolescent pregnancy programs, promote improved services for young girls who are pregnant or at risk of becoming pregnant, and develop a quarterly newsletter that will analyze federal policies and their impact on pregnancy prevention in the South.

Center for Population Options

\$200,000

School-based and school-linked clinics are increasingly popular systems for delivering comprehensive health care to adolescents, many of whom are at risk of pregnancy, sexually transmitted diseases, and drug and alcohol abuse. Schools that have established such clinics typically report usage by between 70 percent and 90 percent of their students and are reporting declines in dropout and pregnancy rates. In 1985 the Center for Population Options established the Support

Center for School-Based Clinics to provide technical and professional services for developing facilities. This two-year grant renews previous Corporation support of the center, which is directed by H. Jean Hyche-Williams, an experienced researcher and administrator in the health field. During the next two years, the center will identify ways to strengthen the reproductive health, family life education, and counseling components of school-based clinics. It will help clinics improve their outreach programs for minority group members, provide technical assistance, act as a clearinghouse for information on school-based clinics, and continue to advocate federal and state support for the clinics. The center also publishes *Clinic News*, a newsletter, and holds an annual conference. Other funds are being provided by the Educational Foundation of America.

Girls Incorporated

\$150,000

Girls Incorporated (formerly Girls Clubs of America) is a national membership organization with 250 affiliates across the United States. More than half the organization's members are girls from ethnic minority backgrounds. Corporation funds over the past five years have supported model programs aimed at preventing first pregnancies in four pilot cities. Two programs are for girls ages twelve to fourteen: "Growing Together," a series of workshops designed to foster better communication between parents and daughters, and "Will Power/Won't Power," an assertiveness training course that encourages girls to delay sexual activity. The other two programs are for girls ages fifteen to eighteen: "Taking Care of Business," a course that emphasizes career planning and pregnancy prevention, and "Health Bridge," which attempts to link girls with the reproductive and other health services available in their communities. Data from the four sites is still being analyzed, but early indications are that the programs are effective. This grant extends the Corporation's support for another year. During that time, Girls Incorporated staff members will complete the data analysis, provide training and technical assistance to Girls Incorporated affiliates and other organizations involved in pregnancy prevention, and disseminate information about the four curricula and their effects through articles in scholarly journals and presentations at meetings of researchers, practitioners, policymakers, and potential funders.

Joy G. Dryfoos

\$100,000

Joy G. Dryfoos, former director of research at the Alan Guttmacher Institute, has received three previous Corporation grants for in-depth examinations of several adolescent problems: school failure, adolescent pregnancy, delinquency, and substance abuse. The resulting book, *Adolescents at Risk: Prevalence and Prevention*, was published by Oxford University Press in the fall of 1990. In addition to estimating the prevalence of each problem behavior and the interrelationships among them, Dryfoos analyzes the common elements in about ninety effective intervention and prevention programs across the United States. This two-year grant is providing Dryfoos with part-time support as she adapts the book for publication in journals

and magazines that reach broader audiences. She is also analyzing the efforts of a number of states to develop more comprehensive approaches to high-risk youth and preparing a set of recommendations for changes in state policies, administrative structures, and financial arrangements to bring about more effective prevention programs for young people.

National Coalition of Hispanic Health and Human Services Organizations

\$75,000

Established in 1974, the National Coalition of Hispanic Health and Human Services Organizations has a membership of some 500 individuals and groups dedicated to improving health services for Hispanics in the United States. With this grant the Corporation joins the Ford Foundation in supporting the first phase of a three-year project — a study by the coalition of pregnancy prevention programs targeted to Hispanic teenagers. Coalition members are surveying a sample of local and national programs to determine the extent and effectiveness of services now being offered to Hispanic girls. At the conclusion of the survey, the coalition will convene an advisory group of Hispanic and non-Hispanic experts on pregnancy prevention to document the key elements of successful programs for young Hispanics and to develop an assessment kit that can be used by communities to evaluate local programs.

Discretionary grants

Sex Information and Education Council of the United States, toward a project to develop and disseminate guidelines for sexuality education for children and adolescents

\$25,000

National Governors' Association Center for Policy Research, for publication and dissemination of a report on state policies affecting pregnancy and parenting

\$5,700

Childhood injury and substance abuse

Children of Alcoholics Foundation

\$85,800

There are approximately seven million children of alcoholics in the United States, and research indicates that these children are more likely to develop physical, emotional, or mental health problems, or to become alcoholics themselves. Some children from alcoholic families, however, do not appear to suffer undue psychosocial harm. The factors that seem to protect these children are the subject of a small but growing body of literature. This eighteen-month grant is enabling the Children of Alcoholics Foundation to conduct an extensive review of the existing literature on resiliency in children and, subsequently, to hold a one-day conference of experts in child development, mental health, family alcoholism, public policy, and related

areas. Attendees will develop a research agenda for children of alcoholics. The results of the conference will be distributed to researchers, policy analysts, and directors of child health programs.

Discretionary grants

San Francisco Foundation, toward research and writing on drug addiction by Avram Goldstein \$23,500

Issues in adolescence

Carnegie Council on Adolescent Development **\$876,012***

A significant number of American adolescents drop out of school, commit criminal acts, become pregnant, abuse drugs or alcohol, become mentally ill, commit suicide, die, or become disabled from preventable causes. The goal of the twenty-six-member Carnegie Council on Adolescent Development, which was established with Corporation funds in 1986, is to generate public and private interest in measures that prevent damaging problems in adolescence and promote healthier adolescent development. Through task forces, working groups, and other activities, the council seeks to break through interdisciplinary barriers, consolidate the best available knowledge, and identify needed research. Thus far the council, with the Corporation, has issued the report, *Turning Points: Preparing American Youth for the 21st Century*, and commissioned a synthesis of current research on adolescent development, which was published in 1990 as *At the Threshold: The Developing Adolescent*. Recent working papers cover such subjects as risk taking in adolescence, life skills training, preventive programs that support families with adolescents, and school and community support programs. From the council's collaboration with the Office of Technology Assessment of the U.S. Congress will emerge the first comprehensive assessment of the health of American adolescents. A major assessment of the current state and future directions of adolescent health promotion efforts will also be produced by the council in 1991. Council members are continuing to explore issues related to families with adolescents, prevention of violence among adolescents, and the role of youth development organizations in meeting the needs of disadvantaged adolescents. David A. Hamburg, the Corporation's president, heads the council, and Ruby Takanishi, a specialist in child development and social policy, is executive director. This appropriation supported the council in 1989-90.

Carnegie Mellon University **\$150,000**

Large numbers of adolescents decide to engage in such high-risk behaviors as smoking, drinking, drug use, and unprotected sexual intercourse with little

** Administered by officers of the Corporation*

thought of the long-term consequences. A 1988 grant from the Corporation underwrote a body of work on adolescent decision making conducted by Baruch Fischhoff, a psychologist at Carnegie Mellon University, and research associate Lita Furby. During those two years Fischhoff, Furby, and other scholars produced an annotated bibliography of research on adolescent decision-making processes and the report, *Teaching Decision Making to Adolescents: A Critical Review*, which was distributed as a working paper by the Carnegie Council on Adolescent Development. They have also written articles on the subject for government agencies and analyzed six existing curricula for teaching good decision-making skills to adolescents. This grant is funding their research for another year. They are conducting several studies based on samples of college-bound students, teenage mothers, and recovering teenage addicts. The studies focus on the wider range of decisions now being faced by adolescents, their ability to perceive the actual risks involved, discrepancies between adult and adolescent convictions about the consequences of risky behavior, and the extent to which teenagers comprehend the differences between a single risky decision and repeated decisions to take risks. Fischhoff will produce a book reporting their findings.

Pennsylvania State University

\$110,000

Although adolescence is a critical period in human development, existing research knowledge on the subject is often fragmentary and so widely scattered among the disciplines that cogent theories about the adolescent years are difficult to formulate. This grant is underwriting the first year's work of an interdisciplinary group of sixty faculty members at the College of Health and Human Development at Pennsylvania State University under the direction of Dean Anne C. Petersen. Members of the group are working with the Carnegie Council on Adolescent Development to identify the most critical gaps in current knowledge about adolescence in five general areas: education, the effects of media, preventive interventions, comparisons between adolescents in the United States and those in other countries, and families of adolescents. Once the gaps have been identified, members will design research projects to address them. It is anticipated that the resulting research projects will be supported by appropriate federal funding agencies, with some further support by the Corporation.

WGBH Educational Foundation

\$400,000

"Degrassi Junior High," coproduced by Linda Schuyler and Kate Taylor, began as a weekly public television program for ten- to fifteen-year-olds. Set in an unnamed North American city with a diverse ethnic population, it portrays teenagers faced with problems of self-image, peer pressure, alcohol, drugs, sexuality, and family relationships. The series has received Corporation funds since it was first broadcast in September 1987. Its audience has grown from 3.5 million in December 1987 to about 6 million today — significant for a public television series. Taped episodes

and accompanying outreach materials are widely used by schools and youth and religious organizations, and the series is aired in more than forty foreign countries. The Corporation has provided funds over eighteen months for the fourth season of the series, titled "Degrassi High" since the third season when the original characters entered high school.

University of Chicago

\$212,000

Children in the United States spend an increasing amount of time unsupervised by parents, and many socializing functions have been transferred from the family to institutions other than schools. These range from such formal organizations as day-care centers, Sunday schools, and community agencies to less directed but pervasive influences like peer groups and mass media. How well the institutions of this "public world of childhood" perform their functions and how they affect children and families has been the subject of a multiyear effort by an interdisciplinary group of faculty members at the University of Chicago, codirected by Margaret K. Rosenheim and Mark Francis Testa. This grant supports the group's study of the risk of violence among children and young adolescents who spend large amounts of time away from their parents. It is examining the different types of violence to which young people may be prone, the possibility of teaching them specific decision-making and violence-prevention techniques, and the effectiveness of current policies in regulating risks. A book for academic audiences will result.

Middle grade reform

Carnegie Corporation Middle Grade School State Policy Initiative

In June 1989 the Task Force on Education of Young Adolescents of the Carnegie Council on Adolescent Development released its report, *Turning Points: Preparing American Youth for the 21st Century*. The report urges far-reaching changes in middle grade organization and management, curriculum, classroom practices, student grouping, teacher education and certification, and linkages to health and other supportive agencies. To help implement these reforms, the Corporation has established the Middle Grade School State Policy Initiative, a three-year competitive grants program offering assistance primarily to state education departments wishing to institute middle school reforms that are in keeping with the recommendations contained in *Turning Points*. Proposals for 1990 were submitted by forty-three states, the District of Columbia, and the U.S. Virgin Islands; twenty-seven were selected to receive fifteen-month grants of up to \$60,000 each. The recipients were chosen on the basis of the proposed projects' potential effect on disadvantaged youth, the support of key state and local leaders, and the prospects for statewide impact on education and youth policy. Many of the states' projects will build on existing middle school reform programs. Proposals cover a broad range of ideas, including the creation of demonstration schools in disadvantaged areas, provision of pre- and in-service training for middle school teachers, and working partner-

ships between middle schools and other youth-serving agencies. The grants are being matched by state funds, and each first-year grantee organization will be eligible to apply for an award of up to \$200,000 to continue its efforts over the next two to three years. As many as ten of these awards will be given. In October 1990 the Corporation sponsored a national workshop in Atlanta that brought together representatives from each grantee state with experts in middle grade education and adolescent development to share ideas and develop new approaches to problem solving. Recipients of the grants are:

State of Alaska, Department of Education	\$60,000
Arkansas Department of Education	\$60,000
California Department of Education	\$60,000
Colorado Department of Education	\$60,000
Connecticut Department of Education	\$60,000
Delaware State Department of Public Instruction	\$60,000
Florida Department of Education	\$60,000
Georgia Department of Education	\$60,000
Illinois State Board of Education	\$60,000
Indiana Department of Education	\$60,000
Kentucky Department of Education	\$60,000
Louisiana State Department of Education	\$60,000
Maryland State Department of Education	\$60,000
Massachusetts Department of Education	\$60,000
Mississippi Office of Policy Development, Department of Finance and Administration	\$60,000
Governor's Office of Management and Planning, State of New Jersey	\$60,000
New Mexico Department of Education	\$60,000
New York State Education Department	\$60,000
North Carolina Department of Public Instruction	\$60,000
North Dakota State Department of Public Instruction	\$60,000
Rhode Island Department of Education	\$60,000
South Carolina Education Improvement Act Select Committee	\$60,000
Texas Education Agency	\$60,000
Vermont Department of Education	\$60,000
University of Washington	\$60,000
Virginia Department of Education	\$58,800
Utah State Office of Education	\$57,250

City University of New York **\$40,000**

This seven-month grant supported expansion of the Early Adolescent Helper Program, established in 1982 by the Center for Advanced Study in Education, a division of the Graduate School and University Center, City University of New York. Program staff members teach faculty members and guidance counselors to conduct seminars on community service for middle school students and secure

after-school volunteer positions for them with agencies such as Head Start, child-care centers, and senior citizens' facilities. The students may read to children, teach music or arts and crafts, conduct life history interviews with senior citizens, or perform other duties, all of which are intended to help build the students' confidence, improve their self-images, and encourage a feeling of connection with their communities. About 200 youths from fifteen middle schools now take part in "helper" programs in New York City and other urban areas. Under the grant, Helper Program staff members introduced the program in workshops at interested schools, enhanced their technical assistance to schools already participating, trained field associates to provide assistance in newly added schools, and publicized the Helper Program through journal articles and direct mailings to educators and school administrators.

Discretionary grants

<i>Southern Coalition for Educational Equity</i> , for a guidebook on the SCEE intensive reading instruction program	\$16,000
<i>National Middle School Association</i> , for a directory of middle grade consultants	\$11,350

General

NAACP Special Contribution Fund **\$450,000**

The education litigation program of the NAACP (National Association for the Advancement of Colored People) Special Contribution Fund has traditionally addressed issues of racial segregation and educational equity. However, as minority students are coming to outnumber whites in many school districts across the nation, the program has begun to champion remedial measures that go beyond questions of segregation to include early childhood education, reduced class size, minority teacher recruitment, and parental involvement programs. The program, under general counsel Dennis C. Hayes, has established an education center in Atlanta, Georgia, to monitor the quality of education available to minority students in seven Southeastern states, negotiate with local school districts where problems are identified, and recommend litigation to the NAACP's national legal department when necessary. The Corporation has supported the Special Contribution Fund since 1972. This grant extends that support for another two years.

National Urban League **\$400,000**

The National Urban League, the oldest black social service agency in the United States, is using this two-year grant to establish the African American Adolescent Male Development Center. The new center will serve as a clearinghouse for applied

research on black males ages eleven to sixteen and for information about existing programs that attempt to encourage the healthy development of that population. Staff members will produce an annual paper on policies and research related to young black males, train members of national and community projects in a wide range of interventions, produce an evaluation guide by which practitioners can assess the effectiveness of their own efforts, and publish the *Male Responsibility Network Newsletter*. The center grew out of a Corporation-funded project of the National Urban League to motivate young black males to take the initiative in preventing pregnancies and to assume emotional and financial support for children already fathered. That project resulted in the report, *Adolescent Male Responsibility: A Program Development Guide*, and was influential in the founding of more than 100 new male responsibility programs across the United States.

Scientists' Institute for Public Information	\$400,000
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Since 1963 the Scientists' Institute for Public Information has operated the Media Resource Service, a free telephone referral service that directs journalists to experts on a wide variety of scientific and health-care topics. A 1986 Corporation grant enabled service staff to develop a Child Health and Development Project, which connects journalists with social, behavioral, and biological scientists and provides the journalists with periodic in-depth briefings on child health and development by panels of authorities. Corporation funding was renewed in 1988. This third grant extends support for another two years, enabling the service staff to conduct other media outreach efforts in two areas: health promotion among minority communities and adolescent development. For the former, staff members are establishing a minority advisory action committee to ensure that briefings on issues relating to ethnic minorities reach minority journalists. More minority scientists will be listed in the service's referral network and engaged as panelists for the briefings. For the latter, the resource service will hold a series of symposia on the U.S. Office of Technology Assessment's report on adolescent health and will devise briefings on topics that may include adolescent violence, the role of schools and community organizations, and confidentiality in, and access to, health services.

Florida State University	\$255,000
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The United States compares unfavorably with other industrialized nations in the educational achievement of its children and in its rates of infant mortality, adolescent pregnancy, and substance abuse. In 1989 the Corporation supported planning for a series of high-level bipartisan seminars bringing scholars and practitioners across a wide range of disciplines together with top government leaders to discuss issues in children's health, education, and development. This grant is underwriting the seminar series' first year. The series is being led by Lawton Chiles, governor of Florida and chair of the National Commission to Prevent Infant Mortality. The initial offering was a two-day retreat, held in Florida during the congressional

recess in April 1990, which provided a group of senators, representatives, and state governors with a broad overview of social, economic, and demographic trends that affect families and children as well as some potential solutions to several of the most urgent problems. More specific topics relating to early childhood and early adolescence were covered at two breakfast and lunch meetings held in Washington, D.C., in September.

Environmental Defense Fund

\$240,000

When pregnant women are exposed even to low levels of lead, their children may be born with irreversible defects that can lead to poor school performance and antisocial behavior. The bodies of very young mothers are especially likely to store high concentrations of lead and to pass it on to the embryo during gestation and to infants through breast-feeding. Young mothers living in inner-city neighborhoods are most apt to be exposed to lead from sources such as contaminated soils and dusts and lead-based paint in deteriorated housing. A 1987 discretionary grant from the Corporation helped the Environmental Defense Fund assess the nature and extent of lead exposure in American women and children. During the next three years, Ellen K. Silbergeld, an authority on toxins and the environment, and project staff members will use this grant to collect current data on toxic substances and correlate their geographic distribution with that of adolescents most at risk of pregnancy. They will also determine needed changes in prenatal care, pregnancy education, health services, and environmental and public health policies, and develop and test a model intervention and prevention program in Baltimore. Members of the fund will disseminate their findings to doctors and scientists through an international conference, journal articles, and a policy statement on the preventable threat of lead exposure among pregnant teenagers.

Education Development Center

\$64,000

Violence among young people is a growing societal problem, and programs aimed at reducing adolescent violence have recently begun to proliferate in the United States. This nine-month grant enabled the Education Development Center to undertake a review of state-of-the-art violence prevention programs for adolescents between the ages of ten and fifteen. The center gathered data about the methods, effectiveness, and requirements for replicating violence-prevention programs across the country and held a meeting of experts in the field to discuss the lessons to be learned. A final report, distributed to the general public, describes a number of model programs, summarizes evaluation findings, critiques methodologies, and outlines issues for the future. The Carnegie Council on Adolescent Development may base future activities on the report's recommendations.

Discretionary grants

<i>Joint Center for Political and Economic Studies</i> , for planning a project on black male youth	\$25,000
<i>National Commission on Children</i> , toward meetings with professional and advocacy groups	\$25,000
<i>On Television, Ltd.</i> , toward a program on television as an educational institution	\$25,000
<i>United States Committee for UNICEF</i> , toward production and dissemination of materials for the World Summit for Children	\$25,000
<i>Urban Institute</i> , for a public policy project to promote the well-being of children	\$25,000 \$25,000
<i>American Academy of Pediatrics</i> , toward a conference on cross-national comparisons of child health	\$20,000
<i>Families and Work Institute</i> , toward a feasibility study of public-private partnerships to improve child care services in New York State	\$10,000

Education: Science, Technology, and the Economy

Over the past seven years, the program, Education: Science, Technology, and the Economy, has built on the Corporation's long-term interests in the education of school-age children, college students, and adults and in access to high-quality education by minority-group members and girls. The aim has been to help all Americans, but especially young people, deal constructively with the scientific and technological transformations under way in American life. The program has had three areas of concentration. The first has promoted the improvement of education in science, mathematics, and technology at the precollege level through the more effective uses of new technologies; the linkage of science-rich sectors, such as industry, universities, and government laboratories, with the schools, particularly those in disadvantaged communities; and the development of curricula in science, math, and technology. Television programs and science reporting have also been supported to improve science education generally.

The second major emphasis has been on improving the access of minority-group members and girls to high-quality education in science, mathematics, and technology. There is a danger that a national preoccupation with science education will widen the distance in achievement between advantaged and disadvantaged students. If more girls and minority-group members are to become part of the economic mainstream, they will need better understanding of math and science. Even for people in jobs not requiring technical training, basic knowledge of science and technology will be important. The Corporation has therefore supported new instructional approaches to encourage these groups to study mathematics and science in secondary school and to consider careers in scientific fields. It has also supported projects that alert policymakers, educators, and community representatives to the importance of strong educational programs in mathematics and science education for minorities and girls.

The third area of concentration has been education reform, with a special emphasis on improving the caliber of teachers in the nation's elementary and secondary schools and on improving the conditions under which they work. The reform movement began several years ago with the concerns of business and political leaders about America's ability to compete in a globalized economy. The Corporation's grantmaking has included a variety of efforts to make teaching careers more attractive to academically well-qualified students. Major support has been given to the National Board for Professional Teaching Standards and to projects aimed at upgrading the education of future teachers, restructuring schools, and recruiting minority-group members into the profession.

National Board for Professional Teaching Standards	\$1,000,000
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The National Board for Professional Teaching Standards, formed in 1987 with the help of \$1 million from the Corporation, is seeking to set national criteria for the voluntary certification of elementary and secondary school teachers. The sixty-four-member board, led by former North Carolina governor James B. Hunt, Jr., is composed of teachers, school administrators, other education specialists, state and local officials, and members of the business community. With significant early research completed, the board expects to begin offering certification in some areas of teaching by 1993. Ultimately the board will offer at least twenty-nine different assessments leading to certification for educators, who may be "generalists" like early childhood teachers or "specialists" in such areas as mathematics or science teaching to middle grade children. The board is forming standards committees composed of practitioners and specialists in each certificate field and establishing a network of assessment development laboratories to work with the committees in developing fair, rigorous, and meaningful assessment procedures. The committees and laboratories will draw some of their data from the Corporation-sponsored Teacher Assessment Project at Stanford University, led by Lee S. Shulman. In 1990, the U.S. Congress appropriated \$5 million for the board. Other funders include E.I. du Pont de Nemours and Company, the Xerox Corporation, the Chrysler Corporation Fund, the Ford Foundation, and the Lilly Endowment.

National Governors' Association Center for Policy Research	\$525,140
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At President George Bush's education summit meeting in September 1989, the president and the nation's governors entered into a partnership dedicated to setting national education goals and helping schools realize them. This second one-year grant is enabling the National Governors' Association (NGA) Center for Policy Research to work with leaders in government, business, the sciences, and education to set standards for student achievement and outline the steps schools must follow to graduate students who meet those standards. Under Michael Cohen, the program director, the NGA has conducted a nationwide survey of existing state efforts toward education reform and is devising a detailed plan that can be adapted by all the states to restructure school districts, provide new and expanded roles for teachers, and implement systems of testing that will more accurately measure students' abilities. Among the organizations and individuals working with the NGA on this project are the National Board for Professional Teaching Standards, the Council of Chief State School Officers, the American Association for the Advancement of Science's Project 2061, the National Council of Teachers of Mathematics, and Allan Odden, a school finance expert on the faculty of the University of Southern California.

Editorial Projects in Education

\$500,000

This sixteen-month grant is supporting *Teacher Magazine*, a new monthly magazine published by Editorial Projects in Education, which produces the weekly newspaper *Education Week*, also started with Corporation funds. First published in August 1989, *Teacher Magazine* is aimed at a readership of precollege teachers. It informs them about recent developments in education reform and academic subject areas, provides editorial space for teachers themselves to address matters of professional and personal concern, and offers case studies of actual teaching situations, among other features. In 1988 the Corporation made a \$275,000 grant to Editorial Projects in Education for a plan designed to increase teacher readership of *Education Week* by providing it at a reduced rate through school libraries. Initial response to the pilot test was promising, but in the meantime the idea for a separate publication devoted exclusively to teachers appeared to make more sense. The balance of the grant was therefore redirected to defray start-up expenses for *Teacher Magazine*. Other philanthropic organizations, among them the Rockefeller Foundation and the Lilly Endowment, have contributed almost \$2.2 million toward the costs of production.

Education Commission of the States

\$400,000

The Education Commission of the States (ECS) has entered into partnership with a number of state governments and with the Coalition of Essential Schools, a network of more than fifty secondary schools committed to a common vision of improved education that includes closer working relationships between teachers and students and a system of promoting students based on demonstrated knowledge rather than on time spent in class. The partnership has resulted in a project known as "Re:Learning," directed by Beverly Anderson, associate executive director of ECS. In Re:Learning, governors, chief state school officers, and other education leaders are asked to support programs of reform at ten secondary schools within their states for a period of five years and to allocate \$50,000 per year to each school. The governors and education leaders then work with ECS staff members in hiring education specialists to help the schools rethink their basic structures and in recommending adjustments to specific state policies to encourage public support for continued reform. Following a year-long Corporation-funded pilot program, six states — Arkansas, Delaware, Illinois, New Mexico, Pennsylvania, and Rhode Island — have joined the Re:Learning program. Another twenty-nine states have expressed interest. This grant supports the project for another two years. Other funders include the Exxon Education, Joyce, and Southwestern Bell foundations.

Teach for America

\$300,000

This one-year grant supports Teach for America, an organization that enlists recent college graduates from a variety of disciplines to teach for two years in primary

and secondary schools throughout the United States. Roughly modeled on the Peace Corps, it was first suggested by Princeton University student Wendy Kopp in a senior thesis on how this country could cope with its shrinking pool of teachers. Kopp founded and now heads the program. In 1990, its first year of operation, the program received more than 2,500 applications for 500 positions at pilot sites in Baton Rouge, Los Angeles, New Orleans, New York City, and rural areas of Georgia and North Carolina. Selected applicants attend a summer training institute and agree to teach for two years, during which they participate in Teach for America orientations, bimonthly meetings, and other supportive activities. Special efforts are made to recruit minority candidates. In addition to providing teachers on a short-term basis to areas where the need is greatest, this program may bring into the field a number of talented individuals who might not otherwise have considered teaching as a profession. Among other funders are the Chrysler, Hertz, and Union Carbide corporations and the Mary Reynolds Babcock, W.K. Kellogg, Merck Company, Mobil, and Starr foundations.

University of Southern California

\$272,300

The Education Productivity and Finance Center within the School of Education at the University of Southern California has received this two-year grant to conduct research on education finance issues and convey the results directly to government leaders. The center will provide technical assistance in putting its recommendations into practice at state and local levels. Under the direction of Allan Odden, a professor of education and nationally recognized expert on school financing, the center will produce and disseminate ten policy papers chosen from among such topics as site-based management and budgeting, new ways to use cost-effectiveness analysis in education policy, the financing of expanded preschool and after-school day-care programs, and the costs of implementing the reforms recommended in *Turning Points: Preparing American Youth for the 21st Century*, the report of the Carnegie Council on Adolescent Development's Task Force on Education of Young Adolescents. The papers will be published in academic journals, distributed to national and state education policymakers, and adapted for a book.

Stanford University

\$140,900

Studies indicate that textbooks determine 75-90 percent of the instructional content and classroom activity of students in the United States, yet U.S. textbooks often compare unfavorably in their design and inventiveness with those used in other industrialized countries. For over five years, a research group based at Stanford University's School of Education and led by Robert C. Calfee, a professor of education and psychology, has studied the problems of creating better designed, more stimulating texts and helping boards of education, school districts, and teachers make the best possible choices from among the texts available. Calfee's group is using this one-year grant to produce two books. The first, a procedural

manual for the education community, will suggest ways of improving the systems by which textbooks are developed, selected, and distributed. The second, a monograph for a general audience, will offer a fuller understanding of the importance of textbooks for the classroom teacher, present the group's views of the ideal textbook, and offer ideas on how publishers, states, school districts, and teachers can work together to get better texts into the schools. The group is collaborating in its research with several school districts, the California Department of Education, and the American Association of Publishers.

Southport Institute for Policy Analysis

\$100,000

By conservative estimates, twenty-to-thirty million adults in the United States work force cannot read, write, calculate, solve problems, or communicate well enough to function effectively in their jobs or their everyday lives. In January 1989 the Southport Institute for Policy Analysis released a report, *Jump Start: The Federal Role in Adult Literacy*, urging national attention to the problem. Written by Forrest P. Chisman, former director of the institute's Project on the Federal Social Role, the report was later expanded into a book titled *Leadership for Literacy: The Agenda for the 1990s*. Both documents received positive public response and helped position the institute as a leader of the growing national movement to increase federal funding of adult literacy programs and to improve efforts by the states and the private sector. In August 1989, a bill was introduced in the U.S. House of Representatives to implement the report's recommendations. The institute has been asked to provide technical assistance to members of the federal executive branch and Congress, as well as governors, state legislators, industrial leaders, and adult educators in over half of the fifty states. This grant is enabling Chisman and his staff to provide such assistance over the next fourteen months.

Claremont Graduate School

\$99,100

Many schools in the United States have been traditionally dominated by "industrial-style" unionism, based on a relationship between teachers and school managers that is potentially antagonistic. Recently, however, a number of school districts have begun experimenting with new forms of school governance that more closely resemble such self-regulating professions as law and medicine. Like these fields, the revised school governance systems rely more on the collective agreement to a set of standards than on rules enforced by management. Widespread adoption of such systems could help promote the professionalization of teaching and improve education by giving teachers a more direct voice in the operation of schools. This fifteen-month grant is supporting a study of recent reforms in labor relations in public schools led by Charles T. Kerchner, a professor of education and public policy at the Claremont Graduate School. Kerchner and his colleagues are producing a book composed of selected case studies of labor-management reform in six large urban school districts with substantial minority populations.

Council of Chief State School Officers

\$85,600

The Interstate New Teacher Assessment and Support Consortium is a collaborative effort begun in 1987 by the state departments of education in California and Connecticut to improve standards of teacher assessment, training, and certification in state education departments across the United States. Now including nearly 150 member organizations — among them the American Federation of Teachers, the National Education Association, and the Educational Testing Service — the consortium holds several yearly seminars for its members on different issues related to teacher assessment and publishes a quarterly newsletter. Initial funding for the consortium, which is directed by Jean Miller, was provided by the Corporation through a grant to the National Governors' Association in 1986. In 1989 the consortium moved from Stanford University to Washington, D.C., where it was installed as a subprogram of the Council of Chief State School Officers. This grant is enabling the consortium to hold seminars and publish its newsletter for another year.

Teachers College, Columbia University

\$75,000

In the summer of 1988, a Corporation-funded workshop on the federal role in education was held in Colorado at the Aspen Institute for Humanistic Studies. The workshop, attended by scholars and policymakers, was held under the auspices of Columbia University's Program in Education for a Changing Society. It was organized by the late Francis Keppel, former U.S. Commissioner of Education; Michael T. O'Keefe, executive vice president of the McKnight Foundation; and Michael P. Timpane, president of Teachers College, Columbia University. The resulting series of papers offered specific recommendations to the federal government concerning its potential role in improving education and helped shape the new national education goals outlined by President George Bush in his January 1990 State of the Union address. This two-year grant is funding two more workshops on education at the Aspen Institute, under the codirection of O'Keefe and Timpane. The topic for the 1990 workshop was the future of higher education. The 1991 workshop will either review the status of the national education goals set forth by President Bush or focus on the education of children in poverty. Each workshop will produce individual papers and a comprehensive report that will be made available to the president and other government leaders. Additional funds are provided by the Ford Foundation.

Teachers College, Columbia University

\$68,000

For the past three years, the Institute on Education and the Economy at Teachers College, Columbia University, has been conducting research on what schools must teach children if they are to be well prepared for work in the future U.S. economy. The institute's efforts began with the production of ten papers synthesizing existing research on human capital needs and links between education and the

economy. In September 1989 a conference was held, with Corporation support, for seventy-five leaders in education, government, and business. This one-year grant is for the publication and dissemination of two publications based on the conference and the ten papers. The first, a nontechnical synopsis of the general economic outlook for the future, was published in January 1990 and widely distributed to the education and business communities. The second will be a book, tentatively titled *Education 2000*, targeted to policy analysts, policymakers, and corporation executives who seek a framework for becoming involved in educational reform. James Harvey, a primary author of the 1983 federal report, *A Nation at Risk: The Imperative for Educational Reform*, wrote the synopsis and is writing the book.

Intercultural Development Research Association	\$50,000
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In October 1989 the Texas Supreme Court ruled in the case of *Edgewood v. Kirby* that the state's system of funding schools is unconstitutional. Citizens in wealthier areas of Texas may pay taxes at rates as low as \$0.08 per \$100 of appraised valuation, while those in lower income areas may pay as much as \$1.98 per \$100. Yet schools in the wealthier districts were spending up to \$17,000 annually per student, while those in poorer areas spent as little as \$2,400. The court ordered the Texas State Legislature to devise a more equitable method of school financing. This one-year grant enabled the Intercultural Development Research Association, under the direction of José A. Cárdenas, to advise the legislature on issues pertaining to school finance reform. The association developed a new finance system based on the wealth of the state as a whole, tested the new system once it was in place, advised the court on the extent to which the system met the letter of the court's decision, and determined further adjustments needed to produce a fully equitable financing scheme.

Discretionary grants

<i>Carnegie Mellon University</i> , toward a model support program for women and underrepresented minorities in science and engineering	\$25,000
<i>Council for Aid to Education</i> , toward support	\$25,000
<i>Education Development Center</i> , toward a study of staff development policy in public education	\$25,000
<i>Educational Testing Service</i> , toward the Second International Assessment of Educational Progress	\$25,000
<i>Hudson Institute</i> , toward support of a project on the technological transformation of teaching and learning	\$25,000

<i>National Center on Education and the Economy</i> , for an international assessment of workers' skills	\$25,000
<i>National Commission on Social Studies in the Schools</i> , toward dissemination of the report of the curriculum task force on social studies education	\$25,000
<i>Stanford University</i> , as a final grant for research on procedures for assessing school teachers	\$25,000
<i>Student Pugwash USA</i> , as a final grant toward student programs on science and technology in society	\$25,000
<i>Francis Dummer Fisher</i> , for an analysis of the educational uses of an information infrastructure combining computers and television	\$23,000
<i>National Humanities Center</i> , for radio programs on science, technology, and American society	\$20,000

Improving mathematics and science education

Stanford University	\$260,700
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The 1989 Corporation-funded report by J. Myron Atkin and Ann Atkin, *Improving Science Education through Local Alliances*, praised the collaborative efforts of schools and outside organizations such as universities and corporations to improve education. It warned, however, that without an overriding vision of what precollege science education can and should be, such alliances might remain marginal and fragmentary. The report recommended that science education collaboratives be tied into such national science curricular reform efforts as Project 2061 of the American Association for the Advancement of Science and Stanford University's Middle Schools Life Sciences Initiative. Under this two-year grant, Atkin, former dean of the School of Education at Stanford, has assumed the role of liaison between the national reform efforts and local collaboratives. He will provide direct on-site assistance and advice to about a dozen science alliances, including those in Los Angeles, San Francisco, San Antonio, and Philadelphia; promote networking and exchange among the sites and with the national programs; and help publicize the collaboratives among policymakers and the general public.

Triangle Coalition for Science and Technology Education	\$325,000
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During the past several years, the Corporation has made twenty grants, totaling almost \$9 million, toward collaborative projects designed to improve precollege science education by bringing schools together with science-rich resources in higher education, industry, and the community. The Corporation also funds the Triangle Coalition for Science and Technology Education, an organization of

eighty-two leaders in science, industry, and education formed by the National Science Teachers Association in 1983 to assist these alliances and encourage the formation of new ones. The Triangle Coalition now lists 336 collaborative programs, for which it holds regional conferences, provides consultations, and produces a bimonthly newsletter, *The Alliance Network News*. This grant extends the Corporation's support for another two years. During that time, the coalition will continue to provide consulting services, revise the handbook, *How to Form and Operate a Local Alliance*, and produce a brochure on the rationale and benefits of building such alliances. Coalition members will work closely with J. Myron Atkin of Stanford University, whose Corporation-funded efforts on behalf of collaborative programs are described on page 43.

Cleveland Education Fund

\$150,000

The Cleveland Education Fund was established in 1984 to improve the quality of public school education in the city, where the students are predominantly low-income members of minority groups. A 1987 Corporation grant helped the fund develop the Cleveland Collaborative for Science Education, which sought to update and expand the training of science teachers through summer programs at local colleges and universities, workshops and summer work placements offered by business and industry, and a small grants program. The collaborative has now formed an advisory panel of forty teachers who are redesigning the science curriculum in Cleveland schools, from kindergarten through grade twelve. This grant is supporting the development and implementation of the curriculum over the next three years. The curriculum will stress continuity from grade level to grade level and focus on the scientific method and thinking skills, integration with other disciplines, the history of science, and other topics. Cleveland Education Fund members, under the direction of former science teacher Joseph M. Flynn, are linking members of the advisory panel with experts in industry and higher education who can aid in the specific development of courses. Panel members and their peers are also working in university and industry laboratories, attending workshops on effective educational strategies and technologies, and communicating with one another through a newsletter, advisory group sessions, and a science resource center.

San Francisco Education Fund

\$150,000

Like the Cleveland Education Fund, the San Francisco Education Fund was established to improve the quality of public school education in San Francisco. In 1986 the Corporation underwrote the fund's San Francisco Science Collaborative, which sought to improve the training of elementary science teachers. It held workshops and seminars at colleges and universities, science museums, and major corporations headquartered in the area and offered a small grants program for teacher-initiated projects. This two-year grant is helping implement phase two of the

project. During this phase, the collaborative will expand to include middle and high school teachers to develop a core of highly competent science teachers at all grade levels who can serve as leaders in science education. Among the new activities are the Science School Team Leadership Project, under which teams of teachers and administrators work with community members to assess the science education needs at various school sites. The Science Leadership Conference, another new endeavor, will make teachers more familiar with other successful science programs now in use. The collaborative will eventually be installed as part of the city school district's educational program.

Los Angeles Educational Partnership

\$150,000

The Los Angeles Educational Partnership was established by members of the Los Angeles business community in 1984 to help strengthen science education in the Los Angeles Unified School District, which is the second largest in the nation, with a student body that is nearly 80 percent nonwhite. A 1987 grant from the Corporation permitted the partnership to develop Target Science, an experimental program based in thirty-seven primary and secondary schools in two geographic regions, one predominantly black and the other Hispanic. Target Science is a teacher-directed program that emphasizes a continuum of instruction from kindergarten through twelfth grade, as well as utilization of resources from the community, industry, and universities, to implement teacher-developed action plans. A recent evaluation, funded by the National Science Foundation, indicates that Target Science is improving the quality of science education and students' performance in class. This three-year grant is funding extension of the program into a third geographic region, with predominantly Hispanic and Asian immigrants. The partnership is also offering planning grants to individual schools and overseeing the transition of Target Science from an experimental program to an ongoing one. Peggy Funkhouser is president and executive director of the partnership.

Foundation for Advancements in Science and Education

\$250,000

Jaime Escalante, the model for the lead character in the film *Stand and Deliver*, is a public school mathematics teacher from East Los Angeles. He has gained national attention for his ability to motivate his generally low-income, largely Hispanic students and, ultimately, to produce academic successes among them. A key element of Escalante's technique is his insistence on demonstrating to his students the relevance of mathematics to the workplace. With this one-year grant the Corporation joins ARCO and other contributors in support of "Futures," a television series developed by the Foundation for Advancements in Science and Education, which features Escalante and his students. Through the use of guest celebrities and real-life scenarios, each "Futures" episode will link mathematics to a specific career. The first episode was aired over cable channels in the fall of 1990; the goal is to produce twenty-six self-contained fifteen-minute segments. "Futures" is designed for in-class use as well as cable broadcast. A comprehensive teacher's

guide is being developed to assist teachers in using the series, and an outreach campaign is being prepared through such organizations as the Mathematics Engineering Science Achievement program and the American Association for the Advancement of Science's Linkages project (see page 50). Steven R. Heard is executive producer.

Nebraskans for Public Television

\$200,000

"Reading Rainbow" is a public television series for children that emphasizes the fun and excitement of reading. First aired in 1983 as a summer series, it has recently been expanded to a year-round schedule. This twenty-month grant is the fourth in a series of Corporation grants in partial support of "Reading Rainbow" segments based on science books. During the school year, "Reading Rainbow" programs are available to schools through the National Instructional Television Satellite service. A *Science Resource Guide* offering learning activities that build on the science segments is distributed to elementary teachers and school media centers. Science episodes of the series are also funded by the National Science Foundation. Twila C. Liggett, former director of Nebraska's "Right to Read" program, is executive producer of the series, and Mary Budd Rowe, past president of the National Science Teachers Association, acts as a science consultant. "Reading Rainbow" is produced jointly by the Great Plains Instructional Television Library, a division of the Nebraska Education Television Network, and WNED-TV, the public television station in Buffalo, New York. Nebraskans for Public Television is administering the grant.

National Academy of Sciences

\$197,000

The Mathematical Sciences Education Board of the National Research Council (an operating agency of the National Academy of Sciences) was created in 1985 at the urging of mathematicians and mathematics educators to provide national leadership in bringing about changes in content, methods of instruction, teacher preparation, and student assessment in U.S. mathematics education. This one-year grant is supporting an outreach project by the board, titled "A Year of National Dialogue on Mathematics Education in the United States." During the year, board members are holding regional conferences to develop action plans for reforming mathematics assessment; the board will convene a national summit on improving mathematics assessment in the spring of 1991. The summit will bring mathematicians together with leaders from government, education, and organizations that design and distribute standardized tests. The regional and national meetings will be based primarily on four reports prepared by the board over the last two years, which collectively offer a comprehensive overview and analysis of math education. They are: *Everybody Counts: A Report to the Nation on the Future of Mathematics Education*, *Reshaping School Mathematics: A Philosophy and Framework for Curriculum*,

Curriculum and Evaluation Standards for School Mathematics, and On the Shoulders of Giants: New Approaches to Numeracy. The fourth report was produced with Corporation funding.

National Academy of Sciences

\$159,000

Studies suggest that in some foreign countries direct parental involvement in education is a key to children's superior performance in mathematics. Seeking to develop more positive attitudes among American parents toward the study of math, the National Congress of Parents and Teachers (also known as the National PTA) and the Mathematical Sciences Education Board of the National Academy of Sciences have produced a kit titled "Math Matters: Kids are Counting on You." The kit includes a planning guide for mathematics projects involving parents and teachers, a videotape explaining the important role of parents in opening up educational opportunities for children, publicity ideas, instructions for PTAs interested in promoting increased parental participation, and activities for parents to perform with their children at home, aimed at increasing mathematical skills. The kit was mailed to PTAs across the nation, and a 1989 Corporation grant funded distribution to 20,000 schools that do not have PTAs. This one-year grant is supporting the production and dissemination of 6,000 copies of a Spanish-language version of the kit. Most will be sent to PTAs and schools serving large Hispanic populations, but about 1,000 will be given to the American Association for the Advancement of Science to use in its programs for Hispanic families.

National Association for Science, Technology, and Society

\$100,000

There is a growing movement in education to include more interdisciplinary studies in curricula from kindergarten through college. Under a 1987 Corporation grant, Rustum Roy, chair of the Science, Technology, and Society Program at Pennsylvania State University, established the National Association for Science, Technology, and Society, a professional organization of some 900 leaders in education, science, government, industry, religion, public interest, and the media in this country and abroad. The association holds an annual two-day technological literacy conference that encompasses such themes as the environment, health, education, technology and work, and values and ethics. The conferences are widely attended by educators and others concerned with the quality of U.S. education. Guest lecturers have included Congressman George Brown, ranking Democratic member of the House Science, Space, and Technology Committee; Nobel Prize winner Rosalyn Yalow; and Lester Brown, founder of the Worldwatch Institute, among others. NASTS also publishes *NASTS News*, a monthly newsletter, as well as the bimonthly professional journal, *Bulletin of Science, Technology, and Society*. This grant supports the association over the next two years.

University of Chicago

\$93,750

In 1983 professors from the departments of mathematics and education at the University of Chicago established the University of Chicago School Mathematics Project. The project seeks to promote curricular reform and teacher education for mathematics instruction in kindergarten through twelfth grade, to evaluate existing teaching materials, and to persuade U.S. schools to utilize the best ideas about math education from other countries. A 1985 Corporation grant enabled project members to develop a new mathematics curriculum for grades seven through twelve, emphasizing mathematical applications in everyday life and the relationships between mathematics and the sciences and between algebra and geometry. Project members, under the codirection of Zalman Usiskin and Sharon L. Senk, have been working over the past five years with writers, editors, and secondary school teachers on four of a projected series of six textbooks that will form the core of the new curriculum. The publisher is Scott, Foresman and Company. Project members hold a yearly conference for teachers who are using or considering using the texts and offer intensive in-service workshops during the summers. This twenty-eight-month grant is permitting final preparation of the remaining two texts, which will be published in late 1991.

Carnegie Institution of Washington

\$90,000

The Carnegie Institution of Washington is an independent research facility with a particular interest in the education of young scientists. This grant provides three years' support to the institution's first Saturday science education program for disadvantaged children. Called "First Light" after a term astronomers use to describe the first use of a new telescope, the program is codirected by the institution's president, molecular biologist Maxine F. Singer, and science educator Charles C. James. "First Light" began in October 1989 with thirty third-grade students from Washington, D.C.,-area schools, who are invited to participate in the program for two to three years. Each Saturday the students meet in a laboratory in the institution's headquarters to study earth sciences. They explore natural phenomena, create experimental designs and use scientific equipment, and meet with scientists at the institution, and they go on field trips to explore the local physical environment. Prospective elementary school teachers from local universities also participate, under a grant from the National Science Foundation. Singer and James work with the students' principals, science teachers, and members of the local Parent Teacher Associations. Other funders include the Linkages project of the American Association for the Advancement of Science, Warner Communications, the Cummins Engine Foundation, and the Philip M. Stern Family Fund.

American Society of Zoologists

\$69,500

Since 1983 the Corporation has supported "Science as a Way of Knowing," a series of annual symposia for high school and college biology teachers held by the

American Society of Zoologists. The aim of these symposia was to acquaint faculty members with new knowledge and developments in the field of biology. Each symposium focused on one of seven specific areas: evolutionary biology, human ecology, genetics, developmental biology, form and function, cell and molecular biology, and neurobiology and behavior. The papers prepared for each symposium were subsequently published in *American Zoologist*, the society's professional journal, and are offered in reprint to individuals and academic libraries throughout the world. As demand for the reprints has been high, this seventy-four-month grant covers additional printing, shipping, and storage costs for a further 24,000 copies of the reprints. The symposium series was organized by John A. Moore, a professor of biology at the University of California, Riverside.

Discretionary grants

<i>American Association for the Advancement of Science</i> , for a congressional staff retreat on issues in science education	\$25,000
<i>American Association of University Women Educational Foundation</i> , for planning a teacher institute on classroom equity issues, especially in the teaching of mathematics and science	\$25,000
<i>Association of Science-Technology Centers</i> , toward a project to strengthen the capacity of science museums to support school science programs	\$25,000
<i>Broader Perspectives, Incorporated</i> , toward a review of science textbooks proposed for use in public schools in Texas	\$25,000
<i>Center for Applied Linguistics</i> , for dissemination of a national project to improve math and science education in middle schools through language instruction	\$25,000
<i>University of Chicago</i> , toward a study of the effects of the planned unification of the European Community on interaction between universities, industries, and national laboratories	\$25,000
<i>Marine Biological Laboratory</i> , toward a fellowship program for science writers and broadcasters	\$25,000
<i>Massachusetts Institute of Technology</i> , toward a summer program in science and engineering for high school teachers and a new science teachers association	\$25,000
<i>Mathematical Association of America</i> , toward planning a project to strengthen minority achievement in mathematics	\$25,000
<i>National Association of State Boards of Education</i> , for a publication on state-level policies to strengthen mathematics and science education	\$25,000
<i>National Center for Science Education</i> , as a final grant toward support	\$25,000

<i>National Conference of State Legislatures</i> , toward activities to build legislative awareness and support for science education	\$25,000
<i>Chicago Education Federation</i> , toward support of the Academy for Mathematics and Science Teachers in Chicago	\$23,400
<i>Iowa Committee of Correspondence</i> , toward a symposium on understanding science and its human impact and follow-up activities	\$12,000

Minorities and girls

American Association for the Advancement of Science	\$850,000
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In 1985 the Corporation funded the Linkages project, a new program of the American Association for the Advancement of Science (AAAS) designed to connect the scientific community with community-based organizations that are working to improve the education of minority members, women, and the disabled. Linkages, codirected by Shirley M. Malcom and Yolanda S. George, is based in the AAAS Office of Opportunities in Science. The project has helped develop and sustain such programs as the Girl Scouts’ Science/Math Initiative and the math/science textbook project of Recording for the Blind, and it has helped the National Council of La Raza revise the mathematics component of its education project. This grant supports Linkages for another three years. During that time, Linkages staff members will continue to help national and local organizations create programs for minority members, women, and the disabled. The project will expand its focus to include outreach to state and city governments interested in improving educational opportunities for these groups, paying particular attention to the design and implementation of more programs for Hispanics and for minority, physically disabled youth — two groups that are especially underserved by the current education system.

Quality Education for Minorities Network	\$575,000
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Since 1987 the Corporation has funded the Quality Education for Minorities Project, based at the Massachusetts Institute of Technology (MIT) and the University of Texas at Austin. Its three-year mission was to produce a comprehensive action plan for improving the education of minorities in the United States from preschool through the postgraduate level. The report of the project, *Education that Works: An Action Plan for the Education of Minorities*, was released in January 1990 and widely disseminated under a grant to MIT (see below). Under this one-year grant, the Quality Education for Minorities Project is being transformed into an ongoing organization of educators, policymakers, professionals, and leaders of social service organizations in support of the action plan. Called the Quality Education for Minorities (QEM) Network, it is based in Washington, D.C. Network members are providing technical assistance to institutions adopting the report’s recommendations and promoting policies that will broaden educational opportunities for

minority members. They will also deliver a yearly assessment of progress toward educational equity in government, business, philanthropy, and schools. Shirley M. McBay, former dean of student affairs at MIT and director of the Quality Education for Minorities Project, is president of the QEM Network.

Massachusetts Institute of Technology	\$255,600
	\$25,000

The report of the Quality Education for Minorities Project, *Education that Works: An Action Plan for the Education of Minorities*, conveyed three fundamental messages: that U.S. education reform cannot succeed without strong minority participation and leadership; that minority families and communities must play a leading role in making changes at the grass-roots level; and that many intervention strategies proved to be successful with minority students can be replicated on a larger scale. This five-month grant, supplemented by a discretionary grant, covered the costs of the national conference and five regional meetings in Anchorage, Atlanta, Minneapolis, San Juan, and San Antonio — all cities with large ethnic minority populations. It also funded a series of meetings between project members and the editorial boards of several large-circulation newspapers as well as the costs of printing and distributing the report. Responsibilities for the project were divided between a resource group, chaired by Shirley M. McBay, who was also project director, and an action council on minority education, chaired by Ray Marshall, professor of economics at the L.B.J. School of Public Affairs at the University of Texas at Austin.

Arizona State University	\$382,000
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A 1988 Corporation grant enabled Arizona State University to establish “Project 1000,” a national effort to increase the number of Hispanic students in graduate school. Directed by Gary D. Keller with the assistance of Michael J. Sullivan, the project comprises a network of 150 undergraduate colleges and 50 graduate schools that provide promising Hispanic students counseling, advice about financial aid, and other help. During the project’s first two years, nearly 2,000 Hispanic undergraduates received counseling; about 200 have enrolled in graduate school, roughly 60 of them in the sciences. Project members hold conferences and on-campus recruitment campaigns, publish a booklet about applying to graduate schools, and maintain a toll-free telephone line for students seeking information. They also work with the Educational Testing Service to prepare Hispanic students for the Graduate Record Examination and have developed a single application form that is accepted by all participating graduate schools. This grant extends the Corporation’s support for another two years, enabling the project to expand its staff and produce one manual on the Graduate Record Examination for students and another on counseling and recruitment for graduate studies for use by undergraduate colleges. The Pew Memorial Trust is also providing funds for the project.

The shortage of minority students graduating from American colleges is especially severe in the fields of mathematics and science and in math and science teaching. Since 1983 the University of California, Irvine, has been working through its Student/Teacher Education Project (STEP) to improve the quality of science and math education in the Santa Ana Unified School District, where 87 percent of the students are members of minority groups. The project brings the university into partnership with three other area institutions: Rancho Santiago Community College, Chapman College, and the California State University, Fullerton. STEP is now establishing model science and technology high schools in Santa Ana and Compton and at Sherman Indian High School, where college faculty members will work with high school teachers and administrators to develop exemplary multimedia curricular materials for the teaching of science to minority students. It has also launched a series of after-school and Saturday science enrichment programs for minority elementary and middle grade students and their parents, using the scientific facilities on the higher education campuses. Additionally, the project is recruiting and preparing minority teachers through tutoring, paid internships, teacher education fellowships, and summer science institutes. STEP is codirected by Manuel Gomez, Robin Casselman, and Joan Bissell. This grant renews a 1987 Corporation grant for another three years.

Morgan State University**\$350,000**

This three-year grant is partially funding the new Academic Champions of Excellence (ACE) program at Morgan State University in Maryland, a historically black university. The ACE program aims to increase the number of minority students in grades six through twelve who will choose to study math- and science-based fields at the university level; to encourage more minority students to pursue teaching once they have completed college; and to identify minority students who are not college bound and either help them finish high school and enter college or acquire the skills necessary to join the work force. The ACE program involves counseling and academic enrichment by a team composed of the principal, a guidance counselor, a math or science teacher, and an English or language arts teacher from the students' home school, along with an experienced teacher from the ACE program. It is now being instituted in four Maryland public schools, serving about 100 students, though it is expected to expand to 200 students within three years. The program is directed by Vinetta Jones, dean of the School of Education and Urban Studies at Morgan State.

Yale University**\$285,000**

The Yale-New Haven Teachers Institute is a twelve-year-old collaborative effort between Yale University and the New Haven public school system, in which 82 percent of students are minority group members, many of them from low-income

families. The institute attempts to strengthen teaching in New Haven public schools by offering workshops and seminars to teachers. Each year as many as eighty middle and high school teachers attend seminars led by senior Yale faculty members, under whose guidance participating teachers research and write a curriculum unit that can be taught in the classroom. A 1985 Corporation grant supported eight seminars over a three-year period in science, mathematics, and technology. More than half of this three-year grant is being used to support the science, math, and technology seminars. The remainder will be used to compile a volume of the best curricular units developed by the participants, along with methodological advice on using the curricula. The volume will be distributed at teachers' conferences across the country.

California State University, Dominguez Hills

\$200,000

In the coming decade, minority students in most urban areas will approach 50 percent of the total student population, while minority teachers are expected to shrink from 10 percent to 5 percent of the teacher work force. Since 1987 California State University, Dominguez Hills, has been conducting its Pool of Recrutable Teachers (PORT) program, based in the Los Angeles area and designed to recruit more minority teachers. Among other activities, PORT has developed classes for future teachers at junior high and high schools, held an annual "Careers in Education" conference for high school students, and established ongoing university programs designed to identify and remedy basic skills deficiencies in prospective minority teachers. PORT recently launched the Future Teacher Institute, which offers interested minority high school students direct teaching experience. Its Aide-to-Teacher Program selects talented students to be teacher aides and helps them strengthen their basic skills before they enroll in teacher training courses. This grant renews the Corporation's support for another two years. During that time, members of the PORT program will disseminate the results of their various projects to educators throughout the country. They will also produce a book-length collection of studies of individuals who have enrolled in the Future Teacher Institute and the Aide-to-Teacher Program, following them before, during, and after their participation.

Fund for New York City Public Education

\$100,000

More than forty American cities have an education fund — a private, nonprofit organization whose broad purpose is to increase private support for system-wide public school improvement. Until recently, New York City, which has one of the most racially and ethnically diverse student populations in the country, was the only major U.S. city without a local education fund. In 1988 a fund was established under the auspices of the New York Community Trust, with Richard I. Beattie as chairman and Beth J. Lief as executive director. Among other activities, the Fund for New York City Public Education administers a small grants program (\$2,000 or

less) for projects submitted by teachers, parents, and, in some cases, students. It is initiating a professional exchange program, under which newer teachers observe more experienced teachers in the classroom. It also plans to focus media attention on the need for middle school reform and to keep local funders informed about promising reform projects and monitor the results of their grants. This grant supports the fund for one year. Other supporters include the Aaron Diamond, Ford, Charles Hayden, and Rockefeller foundations.

Woodrow Wilson National Fellowship Foundation**\$100,000**

Since 1982 the Woodrow Wilson National Fellowship Foundation has held month-long summer workshops at Princeton University for fifty outstanding secondary school teachers of mathematics, science, and history. At Princeton, the teachers work with university faculty members to produce updated curricular materials, which they then share with colleagues in their home districts. Beginning in 1984, the foundation also offered a series of one-week summer workshops in various locations across the country, each held for about thirty middle and secondary school teachers at a college or university campus and overseen by graduates of the Princeton workshop. Since 1986 the Corporation has supported those workshops that concern math and science and that are held in locations easily accessible to inner-city teachers. This grant extends the Corporation's support for another two years. Shirley M. Malcom, head of the Directorate for Education and Human Resources Programs of the American Association for the Advancement of Science, advises the foundation about recruiting minority teachers for the workshops. Other funders include the National Science and Dreyfus foundations, the DeWitt Wallace-Reader's Digest Fund, and the U.S. Department of Education.

Institute for Educational Leadership**\$73,200**

The rapidly growing minority population of the United States is by and large receiving inadequate education and health and social services, a situation that stands to have profound consequences for American society by the twenty-first century. A 1988 Corporation grant enabled the Institute for Educational Leadership to establish the Center for Demographic Policy, whose mission is to inform leaders in government, education, business, and the media about the long-term effects of demographic trends on the nature and needs of the U.S. population. In September 1989 the center published its first major report, *The Same Client: The Demographics of Education and Service Delivery Systems*, which urged that education, health, and social services be coordinated to maximize their effectiveness. This one-year grant supports follow-up activities to the report and several new undertakings. Conferences are being held on collaborations between local and state agencies and on issues concerning the gathering of accurate demographic data. Reports are being prepared on measures colleges and universities can take to enlarge the minority talent pool and on the changing nature of the American family. Harold L. Hodgkinson, former director of the National Institute of Education, directs the center.

Discretionary grants

<i>Council of Graduate Schools in the United States</i> , for a study of the underrepresentation of minorities in graduate schools	\$25,000
<i>The McKenzie Group</i> , for compiling and disseminating court rulings regarding desegregation plans	\$25,000
<i>Fundación Educativa Ana G. Méndez</i> , toward the planning phase of a comprehensive program to enhance minority teacher preparation	\$25,000
<i>National Action Council for Minorities in Engineering</i> , for planning an assessment of precollege science and mathematics programs for minorities	\$25,000
<i>National Council, Boy Scouts of America</i> , toward support of an urban scouting program of the Greater New York Councils	\$25,000
<i>Association of Colleges and Universities of the State of New York</i> , toward planning a project to increase the number of minority faculty in institutions of higher education in New York	\$15,000
<i>University of Texas, Austin</i> , for editing and publishing research papers on the education of minorities	\$10,000

Strengthening Human Resources in Developing Countries

The priorities of the program, Strengthening Human Resources in Developing Countries, are based on a view of development as a process of expanding indigenous human capacity to identify and solve social and economic problems and on the conviction that scientific research provides knowledge and technologies that can help societies achieve development that is sustainable. The current program focuses on selected countries in Africa and the Caribbean that are now or were formerly part of the British overseas Commonwealth.

It gives major emphasis to the application of science and technology for development, supporting projects to strengthen indigenous capabilities and encouraging cooperation among policymakers and scientists in developing and developed countries. The program takes a multidisciplinary approach to the analysis of development issues, drawing on the knowledge, skills, and resources of those in the behavioral, biological, medical, and social sciences as well as in the technical and policymaking communities in developing and developed countries.

A second major emphasis is the improvement of maternal and child health. Initial focus is on reducing levels of maternal mortality and morbidity.

To accomplish both these objectives, the program encourages genuine partnerships between developed and developing countries, promotes the building of networks, and stimulates the translation of research results into policy.

In addition, the program supports efforts within the United States and elsewhere to improve understanding among the general public and policymakers of development issues through the news media and policy-related organizations and through grants to academic institutions to support distinguished visitors from developing countries. In this area, the foundation normally does not fund unsolicited projects.

A special subprogram of activities focusing on South Africa stresses health and educational opportunities for black South Africans.

Science and technology for development

American Association for the Advancement of Science

\$650,000

The American Association for the Advancement of Science (AAAS), under a 1987 Corporation grant, established a program to increase access to current scientific literature among researchers and scientific societies in different African nations and to provide better linkages between African scientists and scientists in other parts of the world. This grant renews the Corporation's support of that program

for another three years. AAAS staff members will continue the practice of distributing U.S. scientific journals to universities and research libraries in sub-Saharan African countries. They will also work with leaders of U.S. industry and other experts to assess the feasibility of introducing teleconferencing and other networking technologies for researchers in different African countries. Finally, they are holding a symposium on science in Africa in conjunction with the annual meeting of the AAAS in Washington, D.C., in February 1991. The symposium, intended to increase American awareness of African scientific accomplishments, will highlight research conducted by African scientists that has made an impact on African development or is relevant to scientific progress in general. Amy Wilson directs the AAAS's African program, and Lisbeth Levy manages the journal distribution project.

African Academy of Sciences	\$300,000
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As African nations increase their capacity for high-quality scientific research on the most pressing problems facing Africa today, scientists and research organizations will need to cooperate with each other and with government officials in the development of urgently needed new technologies. To improve communication and promote such collaboration across the African continent, the African Academy of Sciences was established by the Third World Academy of Sciences in 1985. The academy hosts meetings and seminars and publishes the African scientific journal, *Discovery and Innovation*. It has established the Network of African Scientific Organizations, a group of fifty-eight organizations from over thirty countries that meets annually. It also periodically brings scientists together with policymakers to discuss such issues as drought, desertification, and food production. It publishes a directory of African scientists in all disciplines and the quarterly newsletter *Whydah*, which keeps researchers informed about work in progress by others and about upcoming conferences and symposia. This grant renews a previous Corporation grant for another eighteen months.

World Health Organization	\$203,400
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A 1987 Corporation grant enabled the World Health Organization (WHO) to launch an ambitious effort to determine the most urgent health needs of African women and to address those needs on a sustained basis. After interviewing village women, health and education specialists, community workers, and government officials in Ghana, Nigeria, Zambia, and Zimbabwe, WHO staff posited that the health of African women — especially the poorest of them — would be improved if they were functionally literate and better able to generate income. Under the direction of Aleya Hammad and Catherine Mulholland of WHO, a team of local leaders from each country set out to teach target populations of rural and village women to read and help them pursue income-generating activities. Two meetings were held between these four country teams and teams from Egypt and the Gambia, the latter two participating under a complementary grant from the Rockefeller

Foundation. This one-year grant supported the project's concluding phase, which included conferences held in May and November 1990 as well as an evaluation by WHO staff of the training program's effects on women's and children's health. A report on the project was widely disseminated to policymakers and health researchers in African and other countries.

National Academy of Sciences

\$200,000

Over the past four years, the National Academy of Science's Board on Science and Technology for International Development (BOSTID) has helped developing nations improve their computer systems for storing and retrieving information from foreign and international sources in health, education, agriculture, energy, and other fields. A prior Corporation grant helped BOSTID assess the current state of scientific and technical information systems in selected countries in sub-Saharan Africa. A panel of African and U.S. specialists visited scientific facilities in Africa and prepared a set of recommendations for the future development of scientific and technical information systems. This two-year grant supports the project's next phase. Members of the BOSTID staff are creating a data base of African information projects, establishing a clearinghouse to advise individuals and organizations about information systems, meeting with African government officials to discuss improvements in information technology, and publishing a quarterly newsletter, among other activities.

Africa Leadership Foundation

\$180,000

The Africa Leadership Forum, established in 1988 by the Africa Leadership Foundation, works to improve existing leadership in Africa and to nurture a new generation of capable, innovative leaders. The forum holds meetings between key African and non-African leaders in government, business, academia, the military, and other fields. These meetings cover such topics as the impact of Europe in 1992 on West Africa, agricultural production and food scarcity in Africa, and economic reform. The forum also convenes a series of smaller, less formal dialogues every six to eight weeks in Ota, Nigeria, which cover issues related to leadership, education, youth, communications, labor, health, and women. Reports of the meetings and dialogues are circulated to governments and libraries throughout the world, and a selected number will be published in book form. Olusegun Obasanjo, former head of state of Nigeria, chairs the forum. This grant renews Corporation support of the forum's activities for another year. The United Nations Development Program, the Rockefeller Foundation, and private donors also contribute.

Institute of International Education

\$148,500

The International Health Policy Program (IHPP) was organized in 1986 by the Pew Charitable Trusts, the World Bank, and the World Health Organization to

encourage more effective allocation of developing countries' scarce resources for the improvement of health care. The Corporation has supported various IHPP projects in Africa and has also helped fund workshops and annual IHPP-sponsored meetings involving nine regional research groups composed of representatives from ministries of health, university medical schools, and other institutions in Africa and Asia. Members of the groups consider ways in which research findings can better inform and strengthen the effectiveness of health policies. The IHPP has recently established a fellowship program for young health policy professionals in Africa and Asia and may soon add a system of international health policy training and research centers to provide technical assistance to individuals carrying out IHPP-initiated health policy programs. Davidson Gwatkin is director, and J. Price Gittinger acts as a consultant to the research groups. This grant extends the Corporation's support for another year.

African-American Institute

\$122,500

For the past four years a research team based in Nairobi, Kenya, led by social scientist Achola Palo Okeyo, has been exploring the relationships of agriculture, health, and women's social and economic status in African countries. The researchers, working under the auspices of the African-American Institute, theorize that women's health and agricultural production are linked because women often bear the main responsibility for domestic crop production and because they suffer the most damaging effects of malnutrition. Okeyo and her colleagues are endeavoring to bring scientists and policymakers together with farmers of both genders to determine how technological advances in agriculture can be developed and introduced into traditional family structures so that food production, women's health, and, ultimately, social and economic conditions for women are improved. This eighteen-month grant is permitting Okeyo and her colleagues to continue their research. Okeyo will also confer with American scholars and lecture in the United States about her work on the connections between women's health and food production.

Harvard University

\$100,000

The Commission on Health Research for Development, whose secretariat is located at Harvard University, is a multinational effort begun in 1987 to assess the status of health research and services in developing countries. The commission's findings to date were summarized in a report, *Health Research: Essential Link to Equity in Development*, delivered at a conference held in Sweden in February 1990. The report recommends that each country develop a research base to identify priorities and implement policies that could bring health benefits to the largest number of people. It further calls for international collaboration between researchers in developing and industrialized nations toward finding cures for such universal and intractable ailments as AIDS. This one-year grant is funding wider dissemination

of the report, which was prepared under study director Lincoln C. Chen, Takemi Professor of International Health at the Harvard University School of Public Health, and commission chair John R. Evans, chair of Allelix, Inc., and a trustee of the Rockefeller Foundation. Commission members are organizing workshops and task forces to help carry out the report's recommendations, convening a network of scientists and scientific organizations to support nations' efforts at implementation, and continuing to collect information on health research activities and potential sources of funding for further research.

Commonwealth Caribbean Medical Research Council

\$77,000

The Commonwealth Caribbean Medical Research Council, which is financed largely by the ministries of health of Commonwealth Caribbean countries, aims to improve health services in the region by bolstering local capacity to conduct medical research and by encouraging cooperation between researchers and policymakers. In recent years, however, financial constraints imposed on the ministries of health have sapped the council's funding and thus diminished its effect. This eight-month grant enabled council members, led by chairman Sir Kenneth Stuart and acting director David Picou, to develop a plan for bolstering the council's role in promoting research and increasing its budget. Representatives of the United States Department of Health and Human Services, the National Academy of Sciences, the Commission on Health Research for Development, and other organizations are helping Stuart and Picou determine how the council can more effectively identify the research needed to address the region's main health priorities, enhance its own capacity to encourage such research, collaborate with other scientific and medical organizations, both locally and in the U.S., and pursue alternative sources of funding.

African Medical and Research Foundation

\$50,000

In fiscal year 1990, the Corporation made several grants to organizations aimed at improving health the world over by integrating knowledge of medicine, cultural norms, economics, and individual human behavior. Grants in this area to the World Health Organization and Harvard University are described on pages 57 and 68, respectively. This seven-month grant funded a meeting of African and Africa-based medical and social scientists, convened by the African Medical and Research Foundation (AMREF) in Mombasa, Kenya, in August 1990. Discussion covered a wide range of topics, among them the impact of wars on health, health-related gender issues, and the socioeconomic aspects of such communicable diseases as AIDS, schistosomiasis, and river blindness. The organizing committee for the meeting was chaired by Kofi Asante, deputy director of the Community Health Department of AMREF. A new African association of social scientists and health care workers was established at the meeting. A report of the proceedings was produced, and selected papers from the meeting were published in a special issue of the international journal, *Social Science and Medicine*.

Dalhousie University	\$50,000
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This eighteen-month grant is enabling Alexander A. Kwapong, former vice chancellor of the University of Ghana and vice rector for planning and development at the United Nations University, to study the history, present status, and future of higher education in sub-Saharan Africa. Kwapong’s research is centered on a number of institutions and organizations in and around sub-Saharan Africa, among them the University of Ghana and the Association of African Universities. In addition to studying conditions in those academic bodies he is interviewing education leaders in Africa, Great Britain, and the United States to determine how African colleges and universities can more effectively educate their students about the need to advance African efforts in human resource development, economics, science, and technology. Kwapong currently holds the Lester B. Pearson Chair in Development Studies at Dalhousie University in Halifax, Nova Scotia. He will publish his findings in a series of scholarly articles, ultimately to be collected into a book.

Discretionary grants

<i>African Council on Communication Education</i> , toward its biennial conference	\$25,000
<i>National Academy of Sciences</i> , toward an analysis of the research grants program of the Board on Science and Technology for International Development	\$25,000
<i>World Education Incorporated</i> , toward the North American regional meeting of a worldwide literacy conference	\$25,000
<i>University of Zimbabwe</i> , for a desktop publishing system for the faculty of science	\$25,000
<i>International Epidemiological Association</i> , toward participation of African epidemiologists in its twelfth scientific meeting	\$24,500
<i>Ohio State University</i> , toward a conference in Bellagio, Italy, on the use of drugs and vaccines in developing countries	\$17,250
<i>Obafemi Awolowo University</i> , for a study of self-medication by market women in Oyo State, Nigeria	\$9,800

Maternal and child health

Columbia University	\$998,000
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In the past, research on maternal and child health in developing countries has tended to focus on family planning, population control, and child survival and to exclude specific emphasis on the health status of pregnant women. Yet large num-

bers of pregnant women in these countries die or become permanently incapacitated each year, often due to the combination of inaccessible health services, women's low social and legal status, and adverse economic conditions. This two-year grant renews Corporation support of Columbia University's Center for Population and Family Health, which is attempting to lay the groundwork for improved maternal health care throughout sub-Saharan Africa. The center began several years ago by recruiting and offering technical assistance to eleven teams of researchers from three countries: Ghana, Nigeria, and Sierra Leone. The teams, each of which includes at least one obstetrician, public health specialist, social scientist, and nurse-midwife, have attempted to identify the most pressing maternal health problems and design projects to ameliorate them. Since their formation, most of the teams have received discretionary grants from the Corporation to pursue their research. The center continues to provide technical assistance to the network of teams and is now bringing members together with U.S. research institutions whose work bears directly on women's health in developing countries. It is also reviewing the existing literature on maternal morbidity and mortality, the better to inform African scientists about new developments in research on maternal health and to identify gaps in current knowledge. The center prepares brochures and chartbooks for use by African health care providers, policymakers, women's organizations, and other groups and helps inform potential donors of ways their funds might best be used. As a member of the World Health Organization's International Federation of Obstetricians and Gynecologists Task Force on Maternal Mortality, the center attempts to link sub-Saharan efforts with the global campaign to improve women's chances of surviving childbearing in good health.

Pan American Health Organization

\$400,000

The United States-Mexico border is the world's longest border between an industrialized and an industrializing country. On both sides, birth and disease rates are unusually high, and per capita income is low. Many women work in factories under hazardous conditions, and a disproportionate number of adolescents use drugs or alcohol, become pregnant, or meet violent deaths. With this one-year grant, the Corporation renewed its support to the Pan American Health Organization's binational program of research, education, and training, which emphasizes maternal, child, and adolescent health. Among the project's accomplishments to date are a review of health-care facilities in four border communities; training programs in perinatal care for health-care providers; workshops and other activities on the problems of youth and on the control and prevention of cervical and uterine cancer; and the distribution of manuals and bulletins on primary and child health care. Under this grant, project members are continuing these established programs and initiating several new ones: research on the health problems of female factory workers and their children; an assessment of the use of standard medical records systems in maternal and child care; a cooperative study by border-area universities of regional health issues; and a series of professional seminars on cervical cancer, which will include an evaluation of existing services for screening and treatment.

In addition to its immediate effect on the health of women, children, and adolescents in the region, the project will provide a body of information about the specific effects of stress and unsafe working conditions on women's health and about health-care priorities for infants, children, and adolescents from low-income and migrant families.

University of Bristol

\$80,000

Premature birth and low birthweight greatly increase the risk of illness and death during the first year of life. To date, most studies of these problems have been based on hospital records in industrialized countries. Relatively little is known about low birthweight in developing countries. This two-year grant is supporting a study of factors contributing to low birthweight and growth retardation among children in Jamaica. Jamaican pediatrician Maureen Samms-Vaughan, who is conducting the study, began her research in 1986 by gathering data on over 10,000 deliveries, representing nearly 95 percent of all births in Jamaica during a two-month period. She is analyzing the data for the social, occupational, health-care, and other factors that correlate with low birthweight babies. Her findings should prove valuable to the intra-Caribbean effort to improve maternal and child health that was launched by the University of the West Indies in 1989 with Corporation support. During her two years at the University of Bristol, Samms-Vaughan will work closely with Jean Golding, an associate professor of child health.

University of the West Indies

\$150,000

The Women and Development Unit (WAND) of the University of the West Indies was founded in 1978 to promote and support programs and policies to enhance the participation of Caribbean women in development processes. Directed by Peggy Antrobus, WAND trains women to focus creatively on their own needs and problems, to design projects in response, to identify funding sources, and to implement their projects. It also offers technical assistance on women's issues and programs to governments and nongovernmental organizations and publishes a wide range of materials on women in development. The Corporation has supported WAND since its inception. This two-year grant is funding several activities of the organization, including the publishing and dissemination of a women's health kit for use by women alone or in conjunction with health-care providers throughout the English-speaking Caribbean. WAND is also conducting training workshops for public health nurses and women's self-help groups and is meeting with the National Black Women's Health Project and women's groups from West African countries to share methods for improving women's health.

American College of Nurse-Midwives

\$250,000

In developing countries, nurse-midwives are important providers of care for women during pregnancy, labor, and the postnatal period, often working with

minimal supervision from doctors. They are, therefore, in a good position to help improve maternal and infant health. Last year the Corporation funded the educative efforts among nurse-midwives in Ghana of a team of researchers, one member of which is Margaret Marshall, a representative of the American College of Nurse-Midwives. This grant renews Corporation support for another two years. Marshall and her colleagues are working with members of the Ghana Registered Midwives Association, led by Henrietta Owusu, on several key aspects of nurse-midwife training. They are producing a teaching manual for trainees, providing continuing education (with an emphasis on life-saving skills) for midwives in rural areas, and developing preservice training and annual refresher courses for members of the Ghana Registered Midwives Association. They are also working with the Ghanaian Ministry of Health to establish standards for midwifery and midwife-run maternity houses, to monitor the quality of midwifery services, and to disseminate lessons learned from the program throughout Ghana and to other African countries.

Duke University

\$250,000

Collaborations between medical institutions in the United States and in developing countries can provide the latter with Western technical expertise while offering U.S. researchers the opportunity to study infectious diseases in different environments. This one-year grant is enabling the Duke University Medical Center and Muhimbili Medical Center at the University of Dar es Salaam in Tanzania to work together on the problem of anemia in African children. Anemia — which most often results from malnutrition, infections, or genetic factors — is a common occurrence in many developing countries, especially among pregnant women and children, and is the leading cause of death among children in the pediatrics ward of the Muhimbili Medical Center. Staff members from the U.S. and African medical centers are studying anemia in Tanzanian children under the age of two in an effort to determine the risk factors, including the role of genes, that influence the incidence and subsequent severity of the disease. The researchers will communicate the results to other African scientists dealing with similar problems. They will also produce a book relating their findings and chronicling the evolution of their collaboration.

Family Care International

\$201,000

In preparation for a September 1990 conference on maternal mortality held by the Society of Gynaecology and Obstetrics of Nigeria, staff members of Family Care International worked with Chinyelu B. Okafor, a professor of nursing at the University of Nigeria, to determine the most critically needed reforms in Nigerian reproductive health care. Under the direction of Jill Sheffield, president, they organized meetings of women's organizations in the four geographic zones of Nigeria. At each meeting they determined the nature of the severest problems

associated with pregnancy and delivery, the sources of the problems (whether medical, social, legal, economic, or political), and the actions most immediately required to address them. They also helped the women's organizations from all four geographic zones organize their background material and prepare presentations for the conference.

Society of Gynaecology and Obstetrics of Nigeria

\$75,000

Nigerian women's organizations have been effective in caring for the orphaned children of women who die in childbirth and in promoting improved care for women who are damaged by delivery but survive it. However, these organizations have not yet paid much direct attention to the causes of maternal mortality itself. Toward that end, the Society of Gynaecology and Obstetrics of Nigeria used this one-year grant, along with a grant from the Ford Foundation, to hold a conference on maternal mortality for representatives of women's groups throughout Nigeria. Participants in the conference, which was held in Abuja, Nigeria, in September 1990, discussed formal education for girls, the decriminalization of abortion, and other issues. They also exchanged ideas about how better to inform Nigerian women about reproductive health and how to increase their utilization of health services during pregnancy. The conference built on preliminary efforts funded by the Corporation, the Ford Foundation, and Family Care International. Additional funds were furnished by the United Nations Fund for Population Activities, the United Nations Children's Emergency Fund, and the government of Nigeria.

Sierra Leone Home Economics Association

\$68,000

In sub-Saharan Africa the vast majority of deliveries are supervised by traditional birth attendants who have had no formal training. This grant builds on a 1989 discretionary grant in support of a two-year pilot project to design and test materials that could improve the care administered by traditional birth attendants in Africa. It is being conducted by the Sierra Leone Home Economics Association, an organization of 200 professional women dedicated to improving the health of women and children, in conjunction with the Sierra Leone Midwives' Association and the Seattle-based Program for Appropriate Technology in Health (PATH). Under the direction of nutritionist Pamela Greene, the Home Economics Association is adapting for local use a set of simple technologies developed by PATH to aid in the safe delivery of babies. These include an indicator for monitoring the sterilization of instruments, a color-coded scale for identifying low-birthweight babies, and a pictorial booklet for recording events during prenatal and postnatal care. Members of the Home Economics Association are training birth attendants, as well as professional nurses and other health care workers, in three pilot areas in Sierra Leone. As the training is put into practice, members will monitor its use and effectiveness. They will present their findings at a national workshop for policymakers and health-care specialists.

Many women in developing countries die unnecessarily during childbirth because appropriate technology and skilled treatment are often scarce, especially in rural areas. In 1988 the Corporation funded establishment of a West African research network dedicated to devising improved systems of maternal health care that could be widely adopted, with local modifications. The network consists of eleven research teams in Ghana, Nigeria, and Sierra Leone, all working in cooperation with members of Columbia University's Center for Population and Family Health. This three-year grant and the three grants described immediately below are assisting the work of four teams that have completed the preliminary stages of research and are ready to launch experimental intervention programs that, when evaluated, may be incorporated into the Nigerian Ministry of Health's established program for the care of pregnant women. At the University of Nigeria, one team, under the direction of Wilfred O. Chukudebelu, professor and chair of obstetrics and gynecology, is attempting to reduce maternal deaths caused by hemorrhaging in a rural area of southeastern Nigeria. Chukudebelu and his colleagues are educating the community about the dangers of excessive bleeding, providing first-aid training to midwives and other health personnel, setting up a more reliable system of transportation to medical facilities, and improving emergency services in the local hospital by refurbishing its blood transfusion system and other infrastructure support.

University of Ilorin**\$150,000**

A research team from the University of Ilorin, directed by Olayiwola Adetoro, acting head of the department of obstetrics and gynecology, has identified the main factors that contribute to maternal deaths from genital infections in rural communities in Nigeria. With this three-year grant, Adetoro and his coworkers are conducting a community education campaign to inform women about the dangers of such infections, how to avoid them, how to recognize them if they do occur, and how and when to seek treatment. They are also teaching traditional birth attendants how to identify infections and when to refer patients to more skilled care; ensuring that local clinics and health centers have adequate supplies of antiseptics and antibiotics; and working to improve laboratory service and transportation from villages to clinics.

Ahmadu Bello University**\$160,000**

Under this three-year grant, another team in the West African research network described above is attempting to reduce maternal mortality due to obstructed labor. The research team is educating residents in communities of Zaria about the problem. They are also endeavoring to improve transportation for pregnant women to local health centers and referral hospitals and training hospital personnel in recognizing the symptoms of obstructed labor and techniques for relieving it.

The team is led by Christopher Ekwempu, professor and chair of obstetrics and gynecology at Ahmadu Bello University.

Usmanu Danfodiyo University

\$135,000

In the predominantly Muslim state of Sokoto in northwestern Nigeria, treatment and prevention of maternal illness are hampered by the circumstances of living. Many people reside in remote farming communities that are cut off during the rainy season. Women tend to marry young and are forbidden to leave their compounds for any reason without their husbands' permission. This thirty-two-month grant is funding a plan to improve maternal health in Sokoto by a research team from Usmanu Danfodiyo University, working with the group at Ahmadu Bello University that is concentrating on the problem of obstructed labor. Team members and their collaborators are teaching men and women about treatable maternal illnesses. They are also upgrading the training of traditional birth attendants and other nonmedical health personnel and attempting to improve the treatment available at local clinics by enhancing their drug dispensaries and their blood transfusion and antibiotic capabilities.

National Academy of Sciences

\$100,000

The Institute of Medicine of the National Academy of Sciences has received this one-year grant for a study of African women's health from birth through old age. Researchers are drawing on existing data and identifying gaps in research on reproductive health, mental illness, malnutrition, access to and utilization of health services, and other subjects. The geographical focus is sub-Saharan Africa, although data from other areas of Africa will be included. The study is being conducted by scholars from Africa, the United States, and elsewhere under the direction of Polly Harrison, leader of the International Health Program of the Institute of Medicine. Several outcomes are expected from the researchers' work and recommendations: the increased interest of African policymakers in women's health issues, further research within the African scientific community, and enhanced communication among international scholars. The final report will be distributed to researchers, policymakers, and health workers in the U.S., Africa, and Europe.

Discretionary grants

<i>American Red Cross</i> , toward a project to improve blood transfusion services in Uganda	\$25,000
<i>Emory University</i> , toward planning a worldwide program at the Carter Center to reduce the use of tobacco by women and children	\$25,000
<i>Hesperian Foundation</i> , toward a manual on midwifery for village health workers	\$25,000

<i>University of Lagos</i> , for planning maternal health research	\$25,000
<i>OEF International</i> , toward Commonwealth participation in a regional conference on women, law, and development	\$25,000
<i>Paramedical School, Sierra Leone</i> , for planning research to reduce maternal mortality in the Bo district of Sierra Leone	\$25,000
<i>Paramedical School, Sierra Leone</i> , for planning research to reduce maternal mortality in the Bombali district of Sierra Leone	\$25,000
<i>University of Zambia</i> , toward planning an evaluation of the maternal health programs in the Mwachisompola Health Demonstration Zone	\$25,000
<i>University of Minnesota</i> , toward a study of women's health and reproductive and legal rights by the International Women's Rights Action Watch	\$21,000
<i>Usmanu Danfodiyo University</i> , for institution-strengthening	\$20,000
<i>Africare</i> , toward a maternal health and child survival program in Imo State, Nigeria	\$15,000

Health and human behavior

Harvard University	\$490,000
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It is increasingly recognized that health-care providers should know about patients' cultural backgrounds and psychology in order to treat their physical ailments effectively. The Department of Social Medicine at Harvard Medical School now offers an interdisciplinary program that combines the resources of the medical school and the anthropology department to offer master's and doctoral degrees in medical anthropology — a relatively new discipline built around the relationships between society, psychology, and infectious and chronic diseases. A 1989 discretionary grant from the Corporation enabled faculty members from the Harvard program to visit selected African countries that expressed interest in establishing interdisciplinary health programs of their own. This grant is supporting the first two years of a fellowship series designed to train African candidates in this interdisciplinary approach to health care. Four fellows per year will come to Harvard to carry out research and design projects that can be implemented in their home countries. They will work with various faculty members under the supervision of Arthur Kleinman and Leon Eisenberg, who are, respectively, authorities on medical anthropology and social medicine. Fellows for the first year are being selected from universities in Kenya and Tanzania that have entered into partnerships with the Harvard program.

WGBH Educational Foundation

\$400,000

WGBH-TV, the public television station in Boston, is producing a thirteen-unit interdisciplinary telecourse on Latin America and the Caribbean in association with Columbia, Florida International, and Tufts universities. Entitled "Americas," it is designed to be a college-level introductory course on a vast region with a multiplicity of nations, ethnic groups, cultures, religions, languages, economic policies, and systems of government. It is bringing together the analytic tools of a range of disciplines, focusing on the dynamics that have shaped the region's past and the processes that are shaping its future. Planned are ten one-hour television programs for prime time airing over the Public Broadcasting Service in 1992 and preparation of a book for a general audience as well as a revised undergraduate textbook and related printed materials. This two-year grant supports production of the series and the college course. Major funders include the Annenberg/CPB Project and the John D. and Catherine T. MacArthur and Rockefeller foundations. Executive producer is Judith Vecchione, who was senior producer of the WGBH series on the civil rights movement, "Eyes on the Prize."

National Council for International Health

\$300,000

This two-year grant renews Corporation support of the National Council for International Health, a private, voluntary organization dedicated to enhancing U.S. awareness of international health needs. In addition to promoting this country's support of health-care programs in developing countries, the council advocates the application of lessons learned by other countries to the prevention or amelioration of health problems in the United States, where the cost of health care is steadily rising and the health of low-income citizens is now poorer than that in many other industrialized nations. A 1989 grant from the Corporation funded two conferences, one in Texas and one in Alabama, that brought together health-care experts from this country and abroad to discuss health services in rural areas, infant mortality among lower income families, and the financing of health care systems. This grant is funding four more regional conferences, to be held over the next two years. The conferences are administered by Guraraj Mutalik, former director of the New York liaison office of the World Health Organization. In June 1992 a national conference will be held in Washington, D.C., to discuss lessons learned from the six regional meetings and to launch possible follow-up programs.

African-American Institute

\$250,000

Since 1975 the Corporation has supported the African-American Institute's Program on Policy Issues in African-American Relations, which seeks to expand the

cadre of U.S. policymakers, journalists, and other leaders who are knowledgeable about Africa. The program organizes an annual conference as well as periodic smaller meetings in the United States and Africa between influential members of U.S. society and authorities on African social, economic, and political issues. In 1989 the program held its nineteenth annual African-American conference in Lusaka, Zambia, with a follow-up conference in New York. It also sponsored congressional trips to eastern, northern, and southern Africa and cosponsored with the Nieman Foundation a meeting of African and American editors at Harvard University, among other activities. This grant extends Corporation support for another year. In 1990 the program held meetings on the significance of Africa to the U.S. and Japan, on the economies of Uganda and the southern African states, and on censorship and the African press.

Overseas Development Council

\$200,000

In 1978 the Overseas Development Council was approached by congressional staff members to provide ongoing nonpartisan information and analysis to members of Congress and their staff members on policy issues involving the United States and developing countries. The result was the Congressional Staff Forum, which has now held over 150 conferences for about 7,000 participants, covering a wide range of subjects. Eighteen meetings took place in 1989 under the direction of William Hellert. They included presentations by Thomas Odhiambo, president of the African Academy of Sciences, on pest management in Africa, and by Tim Thahane, a vice president of the World Bank, on the costs of rebuilding southern Africa. Twenty meetings were held during 1990 on human development issues such as drug production, women's health, and AIDS programs; on debt and development in African countries; and on new competition for foreign aid between Africa and Eastern Europe. This grant extends a previous Corporation grant for another eighteen months.

Association of Commonwealth Universities

\$150,000

The Association of Commonwealth Universities, founded in 1913, is the oldest international interuniversity association in the world. Its membership includes approximately 300 universities in twenty-nine countries of the British overseas Commonwealth, almost two thirds of which are developing countries. This three-year grant is funding up to fifteen fellowships for faculty members from universities in sub-Saharan African countries and the Caribbean. The fellowships, extending from three to six months, involve a wide variety of teaching, lecturing, and research exchanges between universities in developing countries and in other nations, both developing and industrialized. It is expected that these fellowships will help open channels of communication within the academic community and permit faculty members at all participating institutions to benefit from the expertise and experience of others.

Development Group for Alternative Policies

\$105,000

The Development Group for Alternative Policies is a research and public education institution that seeks to improve U.S. understanding of developing countries in the hope that American aid will more directly address the needs and priorities of recipients. This one-year grant supports two programs of the group: the Caribbean Development Project and the new African Development Program. The first mainly involves technical assistance to Caribbean organizations seeking financial and other forms of support from public and private agencies in the United States. The second has been developed to facilitate the efforts of a consortium of nongovernmental aid organizations in Africa. The program is enabling organizational representatives to visit the United States to observe and participate in policy debates in Washington, D.C., and assisting African and American organizations in monitoring and disseminating data about the effectiveness of current aid initiatives in Africa. The Development Group for Alternative Policies is codirected by Douglas Hellinger, Stephen Hellinger, and Atherton Martin.

TransAfrica Forum

\$75,000

The TransAfrica Forum, directed by Randall Robinson, provides information on and analysis of development issues in Africa and the Caribbean and explores the impact of U.S. policies in these regions. It holds meetings and briefings for members of Congress and their staffs, scholars, students, and journalists. Its two core publications, the quarterly journal *The Africa Forum* and the bimonthly *Issue Briefs*, reach some 1,500 subscribers, primarily leaders in the black community. The Corporation has supported the forum's work with three previous grants. This grant continues that support for another year. Among the forum's current activities are the Free South Africa Project, designed to inform Americans about the rapidly changing situation in South Africa, and the Southern Africa Media Project, under which forum staff members attempt to improve media coverage of apartheid and related issues. The forum's on-campus seminars attempt to enhance the knowledge of black high school and college students about foreign policy and economic issues in Africa and the Caribbean.

Duke University

\$53,000

One insidious aspect of South African apartheid is its success in preventing white South Africans, as well as citizens of other countries, from seeing for themselves the effects of such a system on human life. The Corporation-funded book of documentary photographs, *South Africa: The Cordoned Heart*, published in 1986, served as an example of photography's unique power to inform. Because black South African photographers work under difficult circumstances in extreme isolation, Duke University's Center for Documentary Studies has initiated a series of photography fellowships in the United States. Working in conjunction with the Centre for Documentary Photography at the University of Cape Town, the Duke

center is hosting two South African fellows per year for 130 days each. During their fellowship period, the photographers will participate in Duke's Center for Documentary Studies' Visiting Journalists Program, perfecting their skills under Alex Harris and other members of the Duke faculty. They will further their studies in New York City at the International Center of Photography, serve as interns with established photography publications, and travel to a number of American communities to discuss their experiences in South Africa. This sixteen-month grant is supporting the first two fellows and related expenses of the project.

University of Southern California	\$60,000
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This one-year grant renews Corporation support of the University of Southern California's fellowship program at the Center for International Journalism. The grant is underwriting the tuition, fees, books, and living stipends of one fellow from Mexico and one from the Commonwealth Caribbean. They are participating in a master's degree program in international journalism that also involves further study at El Colegio de Mexico. Courses, seminars, and other activities focus on policies in the United States, Latin America, and the Caribbean that impinge upon the quality of urban life, the environment, education, the regional economy, and international relations. The journalists meet with their American counterparts and write for American publications while in the United States. With these two journalists, the Corporation will have supported nine fellows at the center. The fellowship program, directed by Murray Fromson, also receives support from the Ford, John D. and Catherine T. MacArthur, and John M. Olin foundations.

Discretionary grants

<i>Action in International Medicine</i> , toward support	\$25,000
<i>African Council on Communication Education</i> , toward a workshop on institutional capacity-building	\$25,000
<i>Development Group for Alternative Policies</i> , toward a symposium on U.S. development assistance policy in the eastern Caribbean	\$25,000
<i>National Council of Returned Peace Corps Volunteers</i> , toward a public education project on development and development assistance	\$25,000
<i>University of the West Indies</i> , toward a conference in tribute to Sir Arthur Lewis and dissemination of the conference volumes	\$25,000
<i>Zimbabwe Project Trust</i> , toward an oral and documentary history of the life of Sir Garfield Todd	\$25,000
<i>Makerere University</i> , for research on U.S. foreign policy toward Uganda	\$22,000
<i>Henry J. Kaiser Family Foundation</i> , toward a magazine on health and development in southern Africa	\$13,000

<i>Brookings Institution</i> , toward consultation of U.S. archives on Uganda in Washington, D.C., by Godfrey Okoth	\$5,750
<i>Educational Broadcasting Corporation</i> , toward a television interview with Nelson Mandela	\$5,000

South Africa

Aspen Institute for Humanistic Studies	\$330,000
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In 1984 the Aspen Institute for Humanistic Studies received Corporation funds to establish a bipartisan program offering members of Congress sustained, intensive exposure to high-quality scholarship concerning U.S. relations with the Soviet Union. That program, led by former Senator Dick Clark, serves as the model for the institute’s Southern Africa Policy Forum, which was founded in 1988 with Corporation funds and is also directed by Clark. Clark served on the U.S. Senate’s Committee on Foreign Relations, heading its subcommittee on Africa. This experience has provided him with a strong base of knowledge about southern Africa. The Southern Africa Policy Forum conducts a series of major conferences between members of Congress and experts on African issues, drawn from the ranks of scholars in the United States, Europe, and southern Africa. The conferences are buttressed by periodic breakfast meetings that focus on special topics. Legislators who are interested in participating agree to attend at least one or two conferences over a period of several years. This grant renews support for another year.

Institute of International Education	\$125,000
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The Institute of International Education is using this two-year grant, along with a grant from the Ford Foundation, to offer individuals and organizations concerned about South African issues the consulting services of J. Wayne Fredericks, an authority on relations between the United States and southern Africa. In a career that spans more than forty years, Fredericks has led various foreign programs of the Ford Foundation, served as U.S. Deputy Assistant Secretary of State for African Affairs, and directed international relations for Chase Manhattan Bank and the Ford Motor Company. Currently he is briefing leaders in government, education, and business in the U.S. and southern Africa and counseling South African organizations about how to operate or seek assistance in the United States. Fredericks organized a nongovernmental conference on the policies of western democracies toward South Africa, which was hosted by the Corporation in March 1989.

Yale University	\$105,000
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The Yale/Wesleyan Southern African Research Program is a prominent center for research on South Africa in the United States. Established in 1977 with grants from the Ford Foundation and the National Endowment for the Humanities, the

program, through its seminars and publications, has become well known for its interdisciplinary work on racial conflict in South Africa. The program also invites South African scholars, usually in the middle of their careers, to spend one or two semesters at Yale University as visiting fellows. This grant, the second from the Corporation for the purpose, is supporting three South African fellows at Yale over the next three years. While at Yale, the fellows work with selected American graduate students and with faculty members of diverse disciplinary and ideological viewpoints. The program aims to provide the South African fellows and their American counterparts with unique insights and opportunities for the exchange of information. Among the faculty members who will work with the fellows over the next three years are scholars in psychology, foreign policy, African and southern African history, and the politics of apartheid. Recent African fellows have included an educator, an anthropologist, and a historian.

Africa Fund

\$100,000

The public television series "South Africa Now" is the only current U.S. source of regular news reporting on South Africa. It is produced by the independent production company Globalvision, Inc., in conjunction with the Africa Fund, an organization established in 1966 by the American Committee on Africa to provide public education about oppressed regions in Africa. The television series is carried via satellite over the Eastern Educational Network and by individually subscribing stations, and segments are aired on "World Report," a weekly news program on the Cable News Network. A 1989 Corporation grant funded coverage by "South Africa Now" of *Uprooting Poverty: The South African Challenge*, the final report of the Second Carnegie Inquiry into Poverty and Development in Southern Africa, and of an associated conference at Duke University. This one-year grant is funding further productions by "South Africa Now" as well as a training program for African broadcast journalists. Daniel Schechter, a former producer of the ABC news magazine "20/20," produces the series.

Institute of International Education

\$100,000

The Institute of International Education's Career Development Fellowship Program is endeavoring to broaden educational opportunities for black South Africans by providing fellowships for study at American universities, colleges, and junior and community colleges. Working with the Educational Opportunities Council in South Africa, staff members of the fellowship program offer fellowships to emerging and established leaders of such South African community organizations as churches, trade unions, alternative education coalitions, professional associations, and intermediary agencies that provide support services to grass roots programs. This grant extends previous Corporation support for another year. Under the direction of Lynne Loomis-Price, the program is awarding fifty-three fellowships. The fellows are studying with faculty mentors at various colleges and universities across the United States in fields that include agriculture, business,

community organizing, counseling, health, journalism, library science, and social work. Other support is provided by the Ford, Hewlett, and Mott foundations, and the U.S. Agency for International Development.

University of the Witwatersrand

\$75,000

This one-year grant continues Corporation support of the Health Services Development Unit of the University of the Witwatersrand. The unit, which has made significant strides toward improving health care for black South Africans, is composed of doctors, nurse-midwives, nurse trainers, and adult educators who help train primary health-care nurses and educate citizens in rural areas of South Africa — areas that are generally neglected by a government health-care system organized primarily to serve urban whites. In addition to providing training and education, members of the unit are developing health-care models that could be used in the future, as South African government policies change. The National Progressive Health Care Network, the leading black South African organization concerned with health care and a Corporation grantee, has identified the unit as its key training institution.

University of Cape Town

\$62,000

A 1987 Corporation grant enabled the University of Cape Town to establish the Centre for Documentary Photography, based in the South African Labour and Development Research Unit. The center, directed by documentary photographer Omar Badsha, provides workshops and darkroom facilities for black photographers, exhibits their work, and serves as a library and archive for prints and negatives of the principal South African photographers. During the past two years, the center has mounted nineteen major photographic exhibitions that have traveled to schools and community organizations throughout South Africa. The center also provides funding and editorial assistance to individual photographers and groups undertaking documentary projects. In partnership with the Center for Documentary Photography Studies at Duke University, it has initiated a publishing program and a series of training fellowships. This grant supports the center's activities for eighteen months.

Institute of International Education

\$50,000

In 1986, funds from the Corporation and the Ford Foundation enabled the Institute of International Education to establish the South African Information Exchange, a clearinghouse of information about U.S.-South African cooperative programs that offer educational opportunities to black South Africans. The exchange, which is directed by Ann Micou, maintains a data base of 15,000 organizations, individuals, and program initiatives in the United States and South Africa concerned with improved education for blacks. The information is used by academic institutions,

foundations, corporations, voluntary organizations, professional associations, public policy groups, churches, and individuals in the United States, Africa, Europe, and Canada. The South African Information Exchange also publishes working papers on issues relevant to South African education, provides technical assistance to educational programs and advice to potential donors, and briefs black South African leaders who are visiting the United States. This grant extends the Corporation's support for another year.

Discretionary grants

United States-South Africa Leader Exchange Program, as a final grant toward the Alan Pifer South Africa-United States Fellowship Program \$25,000

Avoiding Nuclear War

The objectives of this program are: to encourage wide recognition that the threat of nuclear war requires a transformation in the way humanity handles international conflict; to support the scholarly search for ideas and understanding needed to reduce the chances of nuclear war in the short run and if possible to eliminate it in the long run; and to encourage continuing interaction between scholars and the policymaking community in the service of these goals. Grants emphasize independent scholarship to develop new information and ideas and also support selected projects communicating the results of scholarly work to the American public. The program does not support school or college curricular projects.

The program has made a limited number of substantial commitments to universities and other institutions with a strong multidisciplinary approach to the study of international security, arms control, the Soviet Union, and U.S.-Soviet relations. The Corporation does not anticipate making many new grants for programs of this kind. The program also supports research and analysis on selected problems with particular bearing on the avoidance of nuclear war which, because of their complexity or technical difficulty, require attention and clarification by the most competent experts independent of government.

Given the recent dramatic changes in East-West relations, the program will support efforts to consolidate and codify the gains that have been made and to identify new opportunities for institutionalizing U.S.-Soviet and multinational cooperation in the prevention of war and the resolution of conflicts.

Institutional grants for research, analysis, and dissemination

Stanford University

\$1,350,000

Three previous Corporation grants have funded scholarly research at Stanford University's Center for International Security and Arms Control, codirected by John W. Lewis and William J. Perry. This two-year grant is permitting physical and social scientists at the center to study and produce reports in five main areas under the overall theme, "Strengthening U.S.-Soviet Cooperation." These areas cover the reciprocal unilateral disarmament measures that the U.S. and Soviet governments can take; operational arms control to reduce the risk of accidents and misunderstandings in the interactions among armed forces throughout the world; various strategies for controlling the spread of nonnuclear missiles and chemical weapons; and "structural" arms control, the more traditional focus of negotiations. A final area, which overlaps the other four, is reduction of the risks

of accidental and inadvertent nuclear war. In addition to the studies, the center maintains a science fellows program under which established scientists are brought to the center to apply their skills to the solution of international security problems.

Harvard University

\$600,000

The Project on Avoiding Nuclear War at Harvard University's John F. Kennedy School of Government is run by an interdisciplinary group of scholars and pre- and postdoctoral students who have been analyzing the possible paths to nuclear war, the factors that might trigger a nuclear exchange, and actions that could be taken to reduce or eliminate those factors. The project has received Corporation funding since 1983, and this two-year grant is supporting project members' continued work in three areas. The first, under the leadership of Graham T. Allison, Jr., who is Douglas Dillon Professor of Government as well as director of the project, is a joint study between American and Soviet scholars of the prospects for U.S.-Soviet cooperation on crisis prevention. They are focusing on ways in which the two major powers could stabilize their changing relationship and use their new, less adversarial, status to promote security in Europe, Asia, and elsewhere. The second is led by Albert Carnesale, academic dean of the Kennedy School, and Lucius N. Littauer Professor of Public Policy and Administration. It centers on increased reductions in U.S. and Soviet nuclear arsenals and strategic forces and on steps both countries can take to help stem the proliferation of nuclear, chemical, and biological weapons among nonnuclear nations. The third, led by Joseph S. Nye, Jr., director of the Center for International Affairs and Clarence Dillon Professor of International Affairs, is concerned with the potential role of multinational organizations, agreements, and regimes in handling international conflict. Research on this subject will result in a book.

Harvard University

\$735,000

This two-year grant to Harvard University's John F. Kennedy School of Government complements the work of the Project on Avoiding Nuclear War. It is enabling members to explore the most effective ways to organize Western support for strengthening democratic institutions and for developing market economies in the Soviet Union and Eastern Europe. Under the direction of Graham T. Allison, Jr., project members are initiating several model assistance programs in conjunction with key officials from the Soviet Union and Eastern Europe. Economist Jeffrey D. Sachs is providing economic advice to the Polish government and discussing the results of the Polish economic transformation with leaders in the Soviet Union, whose economic situation parallels that of Poland in many ways. Bruce J. Allyn, a Soviet specialist, is acting as a liaison in Moscow between members of the Harvard team and the Supreme Soviet of the U.S.S.R., as well as the government of the Russian Republic and a number of city governments.

Carnegie Mellon University

\$345,000

Adequate measures to verify individual nations' compliance with arms control agreements are a vital need, especially now that chemical agents and munitions, which can be produced more easily than nuclear weapons, appear to be proliferating among some nonnuclear powers. This grant is supporting a two-year study of methods for monitoring production of nerve agents, the most lethal chemical weapons, by the Program on International Peace and Security of Carnegie Mellon University. The study is being conducted by a team of scientists, engineers, social scientists, and policy specialists under the direction of physicist Benoit Morel. Among other aims, Morel and his colleagues are attempting to delineate the characteristics of a facility equipped to produce nerve agents, identify the chemicals that are precursors to the manufacture of these agents, and evaluate the political, military, and diplomatic factors that could motivate nations to produce them. Members of the team are working closely with relevant government agencies, the U.S. Chemical Manufacturers Association, and representatives of military and civilian chemical manufacturing plants. The study's recommendations will be of particular use to the Ad Hoc Committee on Chemical Weapons, which was created in 1980 by the forty-nation Convention on Disarmament and remains the primary negotiating forum for global chemical disarmament.

Carnegie Endowment for International Peace

\$300,000

To alert the public to the dangers of nuclear proliferation and to stimulate further attention to that issue among policymakers, the media, and the scholarly community, the Carnegie Endowment for International Peace has since 1984 produced a series of book-length annual reports on the spread of nuclear weapons. The series is funded by the Corporation and the Rockefeller Brothers Fund. Written by Leonard S. Spector, a senior associate at the endowment and former chief council to the Senate Energy and Nuclear Proliferation Committee, the annual reports are titled *Nuclear Proliferation Today*, *The New Nuclear Nations*, *Going Nuclear*, *The Undeclared Bomb*, and *Nuclear Ambitions*. They provide continuity and new insight into the proliferation question through country-by-country reviews and in-depth exploration of major developments in the field. The Corporation is supporting the production of annual reports and an expanded outreach program for the next two years. This will encompass more frequent topical reports and opinion pieces on proliferation issues for the media and for U.S. and foreign policymakers. The latter is being carried out by Spector and assistant director Jacqueline Smith.

**Parliamentarians Global Action for Disarmament,
Development, and World Reform**

\$250,000

Parliamentarians Global Action for Disarmament, Development, and World Reform (PGA) is a group of more than 600 government officials from thirty-six

countries working to promote peace and international security through innovative approaches to disarmament. Recently, members of the Soviet Union's Supreme Soviet have joined, and members from the new Eastern European parliaments may follow. This grant, the fourth from the Corporation, is funding two projects the PGA will pursue over the next two years. Through conferences, letter-writing, and publications, PGA members are promoting an amendment to the Partial Test Ban Treaty that would wholly eliminate — or more closely restrict — nuclear testing. This amendment, if passed, could help illustrate the nuclear powers' commitment to disarmament and might increase chances that the Nuclear Nonproliferation Treaty will not be abandoned by nonnuclear countries when it comes up for renewal in 1995. The second project centers on the future of peacekeeping organizations and strategies as the polarity between the superpowers begins to decrease and the resolution of smaller scale conflicts becomes a priority. The PGA is launching this project with an international meeting of government leaders titled "Beyond the Cold War: Peacekeeping and Global Security," to be held in Moscow in 1991.

University of Wisconsin-Madison

\$150,000

Because the U.S. government is often reluctant to take public stands against its allies' acquisition or diffusion of nuclear material or technology, there is growing need for nongovernmental, private initiatives to expose international practices that may contribute to the proliferation of nuclear weapons. Gary L. Milhollin, an engineer and professor of law at the University of Wisconsin-Madison and director of the Wisconsin Project on Nuclear Arms Control, and his staff have been tracking and publicizing information on the capacity of nonnuclear nations to produce or obtain weapons-grade nuclear material. They are also analyzing the weaknesses in international agreements or national laws that help make this possible. Project members are defining and proposing new controls over nuclear exports and attempting to generate public support for them. They will complete a model nuclear export law for the entire European community in 1992. In 1989 the Corporation made a discretionary grant to the project. This two-year grant is supporting continuation of their work. Other funders include the Rockefeller Brothers and Ploughshares funds, and the W. Alton Jones, Prospect Hill, and Rockefeller foundations.

George Washington University

\$334,790

Jerrold M. Post, a professor of psychiatry, political psychology, and international affairs at George Washington University, has developed a research and training program within the university that centers on the relationship between human psychological development and international politics. This grant is supporting Post's program for thirty-nine months. He and his assistants are conducting several different projects. Post's book, titled *The Captive King*, which analyzes the effects of illness, disability, and old age on leaders' decision making, is near completion.

He is planning a conference for medical specialists on the particular health problems — many of them stress-related — that may afflict world leaders and examining the effects of stress on different types of people who may find themselves called to action in crisis situations. He is also undertaking an extended study of the psychology of terrorists, which will involve detailed analysis of the different personalities of those who tend to join various anarchic, nationalistic, or religious terrorist groups and will offer recommendations about the tactics most likely to deter the actions of such individuals. Post's work on terrorism will result in a series of papers and, ultimately, another book.

Institute for East-West Security Studies

\$315,800

The Institute for East-West Security Studies was founded in 1982 to encourage scholars and specialists from the United States, Europe, and the Soviet Union to pursue joint research projects and share insights about international security issues and policies. Previous Corporation support enabled members of the institute to publish *Conventional Arms Control and East-West Security*, a volume of essays by influential scholars in the East and West. Recently the institute established a more extensive program on the future role of military power in a rapidly changing Europe. The institute has convened three working groups of independent American, European, and Soviet scholars to research various European military issues. Their work will ultimately provide the basis for three books to be written by scholars affiliated with the institute. One group is concentrating on issues that may arise from the new conventional arms treaty recently negotiated in Vienna. Another is focusing on nuclear deterrence in Europe, and the third, which will build on the work of the second group, will address such nonmilitary threats to European security as terrorism and ethnic and religious conflicts. This grant supports the first and the third of the working groups for three years. Peter M.E. Volten, the institute's director of research, is overseeing the groups. Other support is being provided by the W. Alton Jones Foundation.

American Committee on U.S.-Soviet Relations

\$300,000

The American Committee on U.S.-Soviet Relations was created during the 1970s to promote improvements in East-West relations through research, conferences, and publications on Soviet issues for policymakers, educators, and others interested in U.S.-Soviet affairs. It is now providing periodic assessments of those relations in light of the recent changes in the Soviet government and in Eastern Europe. A previous Corporation grant supported production of several occasional papers on internal Soviet reforms and the book, *Toward a More Civil Society?*, which describes these changes in greater depth. This grant renews Corporation support to the organization for three more years. During that time the committee expects to work closely with members of the Supreme Soviet, which, with the decline of the Communist party, has assumed expanded powers in the Soviet Union. The committee has already hosted a delegation of deputies from the Supreme Soviet

on their first visit to Washington, D.C., and will continue to facilitate contact between members of Congress and the Soviet legislative body. The project is directed by William Green Miller, a former foreign service officer and staff director of the U.S. Senate Select Committee on Intelligence. Additional funds are provided by the John D. and Catherine T. MacArthur and the W. Alton Jones foundations.

Natural Resources Defense Council

\$300,000

Shortly after its founding in 1970, the Natural Resources Defense Council broadened its conception of environmental protection to include the damage that could be caused by nuclear weapons. This two-year grant is supporting continuation of two projects of the council's nuclear program, directed by physicist Thomas B. Cochran. The first project, which has received Corporation funding since 1986, has enabled U.S. scientists to conduct experiments in the Soviet Union on monitoring underground nuclear testing and naval weaponry and to visit Soviet facilities for laser weapons research and the production of nuclear weapons materials. The second project involves a series of *Nuclear Weapons Data Books*. The books have been produced periodically since the early 1980s and are widely used as resources by journalists and members of Congress. The council is now establishing a Nuclear Weapons Data Center, which will continue to produce the data books and will publish articles, offer assistance to journalists, and provide information for such reference sources as almanacs and encyclopedias.

Johns Hopkins University

\$150,000

The economic recovery of Western Europe since World War II, coupled with changes in the Soviet Union's military posture, suggest that the economic and military burdens borne by individual member nations in the North Atlantic Treaty Organization (NATO) may need to be reconsidered. This eighteen-month grant is supporting a comprehensive review of issues connected with the possible redistribution of economic and military responsibilities within NATO. The review is being carried out by the Foreign Policy Institute of the School of Advanced International Studies at Johns Hopkins University, under the codirection of former U.S. Secretary of Defense Harold Brown (who is now chairman of the institute) and former U.S. Secretary of the Treasury William Simon. An executive committee of about thirty Americans and Europeans will prepare reports on the economic, social, budgetary, and military effects of redistributing burdens among NATO members and on specific ways NATO could be restructured to strengthen Europe's role. The reports will be distributed to government figures in all NATO states, and some will be collected into a book.

Federation of American Scientists Fund

\$100,000

In February 1987 the Federation of American Scientists Fund, represented by its chairman, physicist Frank von Hippel, and Jeremy J. Stone, its director, signed an

agreement for a five-year joint study with the Committee of Soviet Scientists for Peace and Against the Nuclear Threat. The study, which involves investigation into the feasibility of verifying international arms control agreements that provide for the reduction and limitation of nuclear weapons, was funded during its first two years by the Corporation and the W. Alton Jones Foundation. During those two years the American-Soviet group produced a body of technical work on a variety of issues, including methods for detecting the presence of fissile materials, verification of a ban on space-based nuclear reactors, and limitations on sea-launched cruise missiles. Briefings on these studies have been made to members of Congress, the Joint Chiefs of Staff, and other government agencies. A book, *Reversing the Arms Race*, was published in 1990. This grant, and a corresponding grant from the W. Alton Jones Foundation, is supporting the project for a third year. The participants are completing their current studies and carrying out more extensive dissemination while planning new collaborative studies for the final two years of their joint endeavor.

Atlantic Council of the United States	\$87,000
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Despite recent improvements in U.S.-Soviet relations, many divisive issues continue to require the attention of both sides. This grant provides support over two years for a joint project involving the Atlantic Council of the United States and the Institute of World Economy and International Relations of the Soviet Academy of Sciences. Under the project, titled "The Future of Soviet-American Relations in a Pluralistic World," a U.S.-Soviet working group of foreign policy specialists are producing reports containing specific policy recommendations to U.S. and Soviet government officials. The group's initial focus is on evolving relations between the two nations in arms control, regional conflicts, economic interaction, and the future of democracy. In a second phase, now being planned, the group will concentrate on the future roles of both countries in Eastern and Western Europe. Andrew J. Goodpaster, chairman of the Atlantic Council and a former Supreme Allied Commander in Europe, and Alexander K. Kislov, deputy director of the Soviet institute, cochair the group. The Ford Foundation and the Pew Charitable Trusts also fund the project.

Discretionary grants	
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<i>Bard College</i> , toward a conference on nationalism and Eastern Europe	\$25,000
<i>Brookings Institution</i> , for research and writing on international relations by Harold Saunders	\$25,000
<i>University of California, Davis</i> , toward a research conference on military intervention to impose political order	\$25,000
<i>University of California, San Diego</i> , toward a conference on security in the Pacific region	\$25,000

<i>Center for Education on Nuclear War</i> , toward a study group on U.S. policy on the use of nuclear weapons	\$25,000
<i>Center for Foreign Journalists</i> , toward an East-West media conference on issues of the 1990s	\$25,000
<i>Center for Foreign Policy Development</i> , toward a project on U.S.-Soviet-Cuban relations	\$25,000
<i>Center for Strategic and International Studies</i> , toward extension of U.S.-Soviet military-to-military dialogue	\$25,000
<i>Harvard University</i> , for research and writing on treaty compliance, interpretation, and adaptation	\$25,000
<i>Harvard University</i> , for support of a Soviet diplomat at the Center for International Affairs	\$25,000
<i>Johns Hopkins University</i> , toward a meeting on U.S.-Japan relations	\$25,000
<i>Massachusetts Institute of Technology</i> , toward a book on the relationship between science, technology, and international affairs	\$25,000
<i>Jeffrey D. Sachs & Associates</i> , toward a project on the economic transition in Poland	\$25,000
<i>The 21st Century Foundation</i> , toward administrative costs of establishing its offices	\$25,000
<i>George Washington University</i> , for a study on the technology of arms control and nonproliferation by Peter D. Zimmerman	\$25,000
<i>Woodrow Wilson International Center for Scholars</i> , toward a conference on the future of Europe	\$25,000
<i>Internews Network</i> , toward a meeting of national foreign policy planners on the future of Europe	\$24,080
<i>University of Maryland Foundation</i> , toward visits by two Soviet scholars at the Center for International Security Studies	\$20,050
<i>Stanford University</i> , toward research and writing by Scott Sagan on the U.S. nuclear weapons command system and the problem of accidental or inadvertent nuclear war	\$20,000
<i>Columbia University</i> , toward support of Anatoly Kandel and Vladimir Shamberg at the W. Averell Harriman Institute for Advanced Study of the Soviet Union	\$16,800
<i>Global Outlook Education Institute</i> , for planning a project on strengthening legislative oversight of defense and security policy in the Soviet Union	\$11,000

Aspen Institute for Humanistic Studies

\$380,800

With Corporation support, the Aspen Institute for Humanistic Studies has for the past five years been working to develop a cadre of congressional members with strong knowledge of Soviet affairs. The premise of the project is that an understanding of the Soviet Union is vital for congressional leaders who make decisions about U.S. foreign policy. Directed by former senator Dick Clark, senior fellow at the institute, the project encompasses conferences, breakfast meetings, and publications. The conferences bring together key House and Senate members from both parties, a number of West European parliamentarians, and leading Western specialists on the Soviet Union and U.S.-Soviet relations. The more frequent breakfast meetings feature experts on a particular current aspect of the Soviet Union or U.S.-Soviet relations. Each conference results in a report published by the Aspen Institute and distributed to policymakers and other interested parties. This grant supports the project for another year. Michael E. Mandelbaum, a senior fellow for East-West Relations at the Council on Foreign Relations, serves as assistant director.

Aspen Institute for Humanistic Studies

\$225,000

The Aspen Strategy Group, a project of the Aspen Institute for Humanistic Studies, is an organization of academics, policymakers, and other prominent individuals dedicated to advancing understanding of policy and practice in international security, arms control, and East-West relations. The group, which meets in full session twice annually, is a source of communication within the arms control community and of reports for use by the government and the general public. A third annual meeting, held in Maryland near Washington, D.C., enables members to share their assessments with a larger body of government officials and the media. Cochairs are William J. Perry, a former U.S. undersecretary of defense for research and engineering, and Admiral Bobby Inman, former director of the Central Intelligence Agency. Members include members of Congress and leaders in industry, the press, the legal profession, and the military. This grant extends previous Corporation support for another two years. The group will review the implications for East-West relations of recent changes in Soviet policy, German reunification, and the disintegration of the Warsaw Pact. The John D. and Catherine T. MacArthur Foundation also provides support.

Education of the public

New York University

\$350,000

Five years ago, grants from the Corporation and the W. Alton Jones Foundation underwrote establishment of the Center for War, Peace, and the News Media at New York University. The center seeks to improve the quality and amount of U.S.

reporting of international security issues. It evaluates coverage (or the lack of it) and provides members of the media with the background information they need to produce news stories that are accurate, penetrating, and comprehensive. Two years ago, with partial support from a second Corporation grant, the center added a Soviet Reportage Project for American correspondents based in the Soviet Union. The project offers a three-day annual conference in Moscow that brings reporters and prominent authorities together to consider a broad spectrum of Soviet issues. It also conveys information about U.S. topics to reporters in the Soviet Union and Eastern Europe. Project staff will soon launch a series of briefings for top decision makers in print and electronic media and will open a journalism resource center in Moscow for Western and Soviet journalists, offering extensive research materials and meetings with visiting specialists in specific areas. The center publishes *Deadline*, a bimonthly review of international security journalism. This grant renews Corporation support of the center's activities for another two years. The W. Alton Jones Foundation also continues to provide funding.

Fund for Peace**\$300,000**

The National Security Archive, a project of the Fund for Peace, is a library and research facility whose purpose is to collect, index, analyze, house, and make available to research centers and scholars contemporary declassified and unclassified U.S. government documents pertaining to national and international security policy. Created by former *Washington Post* reporter Scott Armstrong, the archive also negotiates and litigates on behalf of individuals and organizations seeking material that the staff would like to add to its collection. Recently the archive began building collections of documents by subject and time period, with name and subject indices, bibliographic catalogues, and narrative chronologies. The first four sets — on U.S. policy and the Iranian revolution, 1977-1980; the Iran-Contra affair, 1983-1988; the Cuban missile crisis, 1962; and El Salvador, 1977-1984 — were completed in 1990. They are being published and marketed in microfiche to libraries and scholars by the British-U.S. publisher Chadwyck-Healey. This one-year grant builds on previous Corporation support intended to sustain the archive until revenue from the sale of information and other sources is sufficient to cover its operating costs. The Ford and John D. and Catherine T. MacArthur foundations also support the archive.

ACCESS: A Security Information Service**\$250,000**

ACCESS, directed by Mary E. Lord, was founded in 1986 with the help of Corporation funds. Its purpose is to answer questions and provide referrals for the public, congressional staff members, and journalists about international security issues. Most requests are handled over the telephone. In addition to providing information, ACCESS analyzes the nature of the inquiries it receives and attempts to identify trends in public interest in security and gaps and deficiencies in general

knowledge. It publishes *Resource Brief* and *Security Spectrum*, which summarize particular security issues, outline different points of view, and list resources for further information. ACCESS also produces several more extensive reference volumes that provide periodically updated guides to institutions, organizations, and resources in the security field, to foundations and other sources of funding for security-related projects, and to local groups with education and action programs on security issues. It has recently begun working with organizations such as Rotary International, the American Library Association, and the National Federation of Women's Clubs to ascertain their information needs and put them in touch with expert speakers, resources, and other services. Other funders include the Ford and John D. and Catherine T. MacArthur foundations.

Arms Control Association	\$200,000
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The Arms Control Association is a nonpartisan organization founded in 1971 to increase the public's understanding of the arms control process and its contribution to this country's security. Recognizing that most Americans derive their views and knowledge of these issues from the print and electronic media, the association several years ago began a program designed to offer accurate, up-to-date information and analysis to the Washington press corps, which generates most national reporting on arms control. Association staff members furnish interested journalists with background material, technical assistance, opinions, and policy recommendations. The association also holds periodic briefings for journalists, at which former high-level government officials and senior arms control analysts offer critical analyses of current issues. In addition, the association holds special news conferences in connection with all upcoming U.S.-Soviet summit meetings. This grant renews previous support for two more years.

Scientists' Institute for Public Information	\$185,000
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This nine-month grant supported the first of a projected series of conferences on national security for members of the media. The weekend-long event, organized by the Scientists' Institute for Public Information (SIPI) and titled "New Realities in National Security," was held in November 1990 in Washington, D.C., for leading journalists and others concerned with informing the American public about security issues in a rapidly changing world. It was roughly modeled after the Corporation-funded meetings on U.S.-Soviet relations convened for members of Congress by former Senator Dick Clark under the auspices of the Aspen Institute for Humanistic Studies (see page 85). Planned by an advisory committee of media veterans and international experts, the conference brought journalists together with government officials and civilian scholars in an attempt to achieve a broader understanding of the context in which specific news stories about international security occur. Hodding Carter, former newspaper editor and publisher and assistant U.S. secretary of state, headed the advisory committee and moderated the meeting. SIPI, under the leadership of president Alan McGowan, is now producing a report

on the conference as well as an evaluation to determine whether a continuing series of such meetings would prove useful.

Discretionary grants

Columbia University, toward establishment of an advisory committee on East European economic reform \$25,000

U.S.-Soviet cooperative projects

International Research and Exchanges Board **\$750,000**

Established in 1968, the International Research and Exchanges Board (IREX) is the main mechanism for organizing and managing scholarly exchanges in the humanities and social sciences among the United States, the Soviet Union, and Eastern Europe. Recent changes in the Soviet Union and Eastern Europe have increased the demand for these services. IREX has opened a Moscow office in conjunction with the Soviet Academy of Sciences and with the help of the Ford Foundation has undertaken an extensive review of its program and priorities in light of the new world situation. This grant is supporting IREX's program of exchanges and cooperative projects over the next two years. They include training programs for young U.S. and Soviet scholars in international security, multidisciplinary research with experts from the Soviet republics, and the improvement and expansion of U.S.-Soviet computer communications for scholarly purposes. IREX has received Corporation support since 1984. It is also funded by the United States Information Agency, the National Endowment for the Humanities, the U.S. Department of State, and the Andrew W. Mellon and John D. and Catherine T. MacArthur foundations, among others.

International Research and Exchanges Board **\$250,000**

This two-year grant supports a program of exchanges between the Soviet Academy of Sciences and a number of U.S. academic and other institutions concerned with international relations and security issues. The exchange program grew out of a conference on U.S.-Soviet cooperative projects held by the Corporation in Moscow in November 1989. Under the program, the International Research and Exchanges Board (IREX) is placing promising younger Soviet specialists for three-month stays at leading U.S. research centers, including the Brookings Institution, the RAND Corporation, the Harriman Institute at Columbia University, and Stanford, Harvard, and Maryland universities, and arranging visits to the academy by American scholars from these and other institutions. Most of the Soviet participants will be associated with the School for Disarmament and International Security, sponsored by the academy and its Institute of U.S.A. and Canada Studies. Andrei Kokoshin is dean of the school and a deputy director of the institute. It is hoped that this

series of exchanges will introduce a new generation of Soviet scholars to the American academic community, and vice versa. The program builds on two previous meetings of younger U.S. and Soviet specialists in international security, which were organized by IREX and funded by the Corporation.

International Foundation for the Survival and Development of Humanity

\$500,000*

The International Foundation for the Survival and Development of Humanity is the first fully independent international foundation operating within the territory of the Soviet Union. Its purpose, broadly stated, is to promote international cooperation toward finding solutions to the most urgent problems now facing humanity. It funds projects, offers technical assistance, publishes reports, and holds workshops and meetings on subjects related to international security, human rights, the environment, and education and culture. The foundation's main office is in Moscow, where it operates under an unusual decree from the U.S.S.R.'s Council of Ministers that grants it independent, nonprofit, nongovernmental status. It has additional offices in the U.S., Bulgaria, and Germany and is governed by a board of twenty-nine leaders in academia, science and technology, law, medicine, theology, and international relations from sixteen countries in the Americas, Europe, Asia, and Africa. This grant contributes to the foundation's operating costs for two years. Since its establishment the foundation has produced a number of major reports on a wide range of topics, including *Building Democratic Institutions: New Soviet Legislators Study the Theory and Practice of American Government*, *Energy Efficiency and the Global Environment*, and *Toward a Comprehensive Nuclear Warhead Test Ban*.

University of California, San Diego

\$400,000

In 1985 representatives of the Corporation met with officials of the Soviet Academy of Sciences in Moscow to discuss the use of computers in early elementary education. From that meeting a Corporation-funded exchange was launched between U.S. and Soviet researchers, designed to draw constructively on the expertise each side brings to the use of computers in education while setting an example of the potential benefits of cooperation between the two societies. The exchange is coordinated by Michael Cole, who directs the Laboratory of Comparative Human Cognition at the University of California, San Diego, and by Alexandra Belyaeva, director of the communications laboratory of the Soviet academy's Institute of Psychology. Staff members from both sides have exchanged visits to observe children using computers to learn; similarly, children from the two countries have communicated with one another by computer and played a role in each other's education. Under this eleven-month grant, members of the exchange are producing papers on the results of the project, which include several new software

*An authorization for this project was made in 1989 and appeared in the schedule of appropriations and payments in Carnegie Corporation's annual report for that year. However, the grant was made this year.

products designed to encourage the development of higher-level cognitive skills; evidence about the ways in which adding intercultural communication to children's learning situations may affect what and how children learn; and insights into the ways researchers can overcome the barriers to collaboration posed by distance and cultural and political differences.

Villanova University

\$301,500

As the Soviet Union undergoes dramatic changes, it is important for that country and the United States to gain a better understanding of each other's political systems. Toward that end, Jeffrey W. Hahn, a Soviet specialist and professor of political science at Villanova University, has established a joint U.S.-Soviet study group charged with conducting in-depth analyses of U.S. and Soviet legislative and political processes over the next three years. This grant is funding the U.S. members of the group for those three years. During this time they will travel to the Soviet Union under the auspices of the International Research and Exchanges Board. They will attend legislative sessions, interview elected and appointed officials, and conduct public opinion surveys. The Soviet group, directed by M. N. Marchenko, dean of the juridical faculty of Moscow State University, will engage in research in the United States. The groups will hold three annual conferences, two in the United States and one in the Soviet Union, to compare their findings and disseminate them to government leaders, scholars, and journalists. They will produce monographs and at least two books. One will summarize the findings of the U.S. team and be published in the United States; the other will be written and published by the Soviet side.

Harvard University

\$213,500

One important implication of the recent Soviet move toward more democratic processes is the need to shift from a conflict-resolution system in which internal disputes are settled on the basis of power and authority to one based on rights, due process, and negotiation. This eleven-month grant is underwriting a new project on negotiation and dispute resolution in the Soviet Union by the Program on Negotiation at Harvard Law School, an interuniversity consortium of faculty, graduate students, and staff from Harvard University, the Massachusetts Institute of Technology, and other Boston-area universities. Members of the program, who have designed courses and seminars on conflict resolution for other countries, are working with Soviet scholars and specialists to address Soviet needs in three ways: first, assisting in the organization of an emerging Soviet consortium of research institutions and public organizations that, when operational, will be the Soviet Union's first nongovernmental center on conflict resolution; second, developing and testing a standard curriculum for a course on negotiation to be taught in the Soviet Union; and third, helping to plan an international conference on the theory and practice of national and/or ethnic conflict management, to be held in Moscow in 1991. The project's principal investigators are Bruce J. Allyn, Scott Brown, Roger Fisher, and William L. Ury.

Johns Hopkins University

\$150,000

As the United States and the Soviet Union address some of the fundamental issues dividing them, they are recognizing their common stake in understanding and encouraging resolution of regional conflicts. This nine-month grant is supporting the initial phase of a three-year collaborative study of conflict resolution in developing countries. It is jointly conducted by I. William Zartman, an Africanist and specialist on negotiations and conflict resolution with Johns Hopkins University's Paul H. Nitze School of Advanced International Studies, and Victor Kremenyuk, a deputy director of the Soviet-based Institute of U.S.A. and Canada Studies and a specialist in international relations and international organizations. Zartman, Kremenyuk, and their colleagues will study regional conflicts that, in the past, have attracted the superpowers' competitive involvement. It is hoped that their studies will produce an improved, shared understanding of the most effective ways for the contending nations to cooperate in the resolution of local conflicts. If the project proceeds as planned, three books will be published at the rate of one per year. A fourth will synthesize the project's analyses and conclusions.

Harvard University

\$88,500

Kurt M. Campbell, an assistant professor of public policy and international relations at the Center for Science and International Affairs at Harvard University, has been serving as a fellow in the office of the Joint Chiefs of Staff, working on activities aimed at promoting ties between U.S. and Soviet military forces. He has been involved in negotiations with the Soviet Union concerning dangerous military activities and participated in Admiral William J. Crowe's two recent trips to the Soviet Union, the first ever by a current or former chairman of the Joint Chiefs of Staff. This fifteen-month grant is enabling Campbell to remain in his present capacity at the Pentagon. Campbell will coordinate and facilitate the continuation of a recently established Joint Chiefs of Staff Advisory Group on the Future of U.S.-Soviet Military Relations, which links military officials with civilian experts to assist in the shaping of future U.S.-Soviet military contacts. Campbell is completing a book, *Braided Dialogues*, which traces the history and explores the potential of military diplomacy between the United States and the Soviet Union.

Institute for Advanced Study

\$58,000

With U.S.-Soviet barriers dropping dramatically, the Soviet Union now faces the real possibility that a number of its best scientists will leave for the freer atmosphere and more generous compensation offered in the West. It seems desirable for the United States to develop a plan by which this country can benefit from the expertise of Soviet scientists without encouraging a mass migration that would drain the Soviet scientific community. Marvin L. Goldberger, director of the Institute for Advanced Study in Princeton, New Jersey, is attempting to launch a series of visits by distinguished Soviet physicists and mathematicians to the United States

in the hope that such visits will enable Soviet scientists to enjoy some of the benefits of the West without feeling the need to emigrate. This four-month grant, along with a contribution from Princeton University, is funding a trial visit by Vladimir Gribov, a physicist studying the problem of quark confinement. In addition to working with fellow physicists at the institute, Gribov is consulting with Goldberger and members of the Corporation about designing long-term scientific exchange programs. Plans are being made for reciprocal stays in the Soviet Union by American scholars.

Discretionary grants

For telecommunication costs associated with a U.S.-Soviet project on the educational uses of computers in the early elementary school grades	\$25,000*
<i>Center for Foreign Policy Development</i> , toward planning a joint U.S.-Soviet project to develop a video conferencing facility for academic exchanges	\$25,000
<i>Dwight D. Eisenhower World Affairs Institute</i> , toward a U.S.-Soviet exchange on earthquake management	\$25,000
<i>Harvard University</i> , toward a joint U.S.-Soviet workshop on diplomatic negotiation	\$25,000
<i>Washington Council on Non-Proliferation</i> , toward developing U.S.-Soviet dialogue on nonproliferation	\$25,000
<i>Harvard University</i> , for planning a U.S.-Soviet joint study of criminal justice systems	\$19,500
<i>Columbia University</i> , for a faculty seminar on the political psychology of Soviet-American relations	\$12,375
<i>Brookings Institution</i> , for visits of Soviet international security scholars	\$11,000
<i>Columbia University</i> , for visits of Soviet international security scholars	\$9,970

* Administered by officers of the Corporation

Special Projects

The Corporation also awards grants outside its four main programs. These grants are most often made toward the strengthening of democratic institutions in the United States. Over the past year, the Corporation has assisted minority groups in assessing the fairness of, and participation in, the redistricting process that follows the census and in supporting a small subprogram in conflict prevention and resolution.

Within Special Projects, the Corporation also maintains its membership in national and New York regional organizations that monitor the activities and represent the interests of foundation and other nonprofit organizations to the public and the government. These organizations provide information about foundations and help foundations and the independent sector learn how they are perceived by their constituents, the public, and the government.

The largest percentage of the current Special Projects budget supports a special Corporation commission aimed at strengthening the means for incorporating scientific and technological knowledge into federal and state policy and administrative decision making.

Science policy

Carnegie Commission on Science, Technology, and Government

\$1,872,431*

The Carnegie Commission on Science, Technology, and Government was created by the Corporation in 1988 to help government institutions respond to the unprecedented advances in science and technology that are transforming the world. The twenty-two-member commission, cochaired by Joshua Lederberg, president *emeritus* of Rockefeller University, and William T. Golden, chair of the American Museum of Natural History, includes prominent scientists, educators, journalists, attorneys, and political and business leaders. It is spending approximately five years assessing the ways that government makes decisions that involve science and technology and is recommending changes in organization, and the decision-making process, that will enable government agencies to respond more effectively. To date, the commission has published three major reports: *Science & Technology and the President*, *E³: Organizing for Environment, Energy, and the Economy in the Executive Branch of the U.S. Government*, and *New Thinking and American Defense Technology*. During the past year, commission members, together with the National

* Administered by officers of the Corporation

Research Council, initiated a joint study of the U.S. government's ability to attract and retain top-quality technical personnel. The commission established groups to examine mechanisms for improving the way that Congress, the judicial and regulatory system, and the states support and use science and technology, and has also established task forces to deal with the federal government's role in advancing commercial technology and science education. One special task force is looking into mechanisms for establishing long-range goals for scientific and technological research. Under the leadership of former President Jimmy Carter, one task force is looking at the role of science and technology in foreign aid. During the fiscal year 1990, grants were made for the following related projects:

<i>University of California, San Diego</i> , for support of a meeting on government science policy	\$18,000
<i>Illinois Institute of Technology</i> , for the preparation and dissemination of a summary of the conference, "Science, Technology, and the Allocation of Global Resources"	\$11,000
<i>Stanford University</i> , for support of a seminar series on science, technology, and government	\$10,240
<i>New York Academy of Sciences</i> , toward support of meetings on science policy	\$4,000

Council for Excellence in Government	\$75,000
	\$25,000

The Council for Excellence in Government, founded in 1983, is an organization of six hundred leaders in business who have previously served as senior government officials. Its mission is to communicate to the general public the importance of public service and to encourage the most able candidates to enter that field. A 1988 grant from the Corporation helped finance preparation of *The Prune Book: The 100 Toughest Management and Policy-Making Jobs in Washington*, which describes challenging and potentially rewarding positions in the U.S. government. This one-year grant, along with a discretionary grant, is funding the second "Prune Book," which will identify and examine the most demanding management and policymaking government positions in the fields of science and technology. Each job description will provide information about responsibilities, goals, management tasks, issues, problems, working conditions, and necessary qualifications. Most of the jobs described will be subcabinet positions in the executive branch, along with some congressional appointments. The book is being prepared by John H. Trattner, who wrote the first "Prune Book."

Discretionary grants

<i>George Washington University</i> , for a summer science policy intern at the White House Office of Science and Technology Policy	\$5,000
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Lawyers' Committee for Civil Rights Under Law**\$350,000**

The Lawyers' Committee for Civil Rights Under Law, based in Washington, D.C., among its endeavors works to expand the participation of citizens in the electoral process through litigation, monitoring, and education. The committee, which is directed by Barbara R. Arnwine, has received Corporation support since 1983. It provides legal representation to minority community groups seeking to challenge racially discriminatory congressional redistricting and legislative reapportionment plans in court. It monitors the federal Justice Department's enforcement of the Voting Rights Act of 1965 and recently published a manual for litigators and community leaders about bringing voting rights violation suits. A portion of this grant was used for a special conference, held in April 1990, for minority community leaders, minority elected officials, and voting rights lawyers and activists who are monitoring redistricting following the 1990 census. The balance supports the committee's ongoing work for another three years.

American Civil Liberties Union Foundation**\$300,000**

The Voting Rights Act of 1965 provided the legal basis for challenging many of the barriers to voting faced by minority Americans. In 1982 the act was strengthened and extended in several ways, including a twenty-five-year extension of the requirement that certain states and localities prove to federal authorities in advance that any proposed changes in voting laws or procedures are not racially discriminatory. Since 1983 the Corporation has supported the Southern Regional Office of the American Civil Liberties Union (ACLU) Foundation in its efforts to enforce the Voting Rights Act. With this three-year grant the ACLU's regional office is conducting community workshops on voting rights, and with other civil rights organizations is monitoring the redistricting that will follow the 1990 census. It is also initiating litigation in a number of cases challenging the at-large election of city commissioners, school board members, and state court judges.

People for the American Way**\$350,000**

Democracy's Next Generation, the report of a study conducted by the nonpartisan organization People for the American Way, more commonly referred to as People For, indicates that a large percentage of young Americans do not vote and possess scant knowledge of the obligations of citizenship. This two-year grant builds on a previous discretionary grant to People For in support of a broad effort to promote civic participation among young people. People For is conducting media outreach about the need to increase civic awareness among the young, and has presented the findings of *Democracy's Next Generation* to the House Select Committee on Children, Youth, and Families. It has also developed "First Vote," a model curriculum that explains the procedures for registration and voting. The curriculum has been used in youth centers across the country, and is now being introduced into

public schools along with background materials, technical assistance, and an accompanying videotape produced with funds from the Rockefeller Foundation. Additionally, the organization is distributing pamphlets on youth civic responsibility to parents and elected officials and is cosponsoring with the Congressional Black Caucus a series of meetings to promote civic participation among minority youth. In two years, People For will formally evaluate the effectiveness of its programs.

Center for Policy Alternatives

\$250,000

In 1988, sixty million Americans who were otherwise eligible to vote did not register. Many states, as well as the federal government, have recently begun exploring ways in which the registration process can be made simpler and more accessible. Proposed solutions include mail-in registration forms and "motor voter" laws that allow citizens to register when they renew their driver's licenses. This two-year grant extends the Corporation's support of the Center for Policy Alternatives (formerly known as the National Center for Policy Alternatives), a nonpartisan public policy organization working with state legislatures on strategies for increasing voter registration. The center maintains a data base on the most effective measures now being used to facilitate registration, provides technical assistance to state governments interested in pursuing reforms, and publishes the *State Report on Voter Participation*, which provides periodic updates on trends in voter participation. These and other activities have been instrumental in the adoption of voter registration reforms by a number of states and in the drafting of legislation pending before Congress that would set registration standards for federal elections. During the two-year term of this grant, the center will research three areas: the design and use of new technologies to aid in voter registration, programs to increase registration among young people, and model registration forms that can be used by the semiliterate.

Rutgers University

\$63,200

This one-year grant funded a symposium on state legislatures held in Williamsburg, Virginia, in April 1990. The symposium reviewed the twenty-five-year history of a series of organized efforts to strengthen state legislatures. One key element in that history was an annual Corporation-funded summer workshop on legislative reform held from 1965 to 1975 under the auspices of the Eagleton Institute of Politics at Rutgers University. Those symposia brought together promising young members of the fifty state legislatures for a week-long exchange on the strengths and weaknesses of legislatures and the possibilities for improvement. The 1990 symposium brought fifty alumni of the original series — many of whom have now become members of Congress, state legislative leaders, or governors — together with thirty current legislators, more than half of whom were minority-group members and women. Their discussions were based on a series of eight papers on such topics as the nature of legislative representation, the legislative

role in education, and current public attitudes toward state legislatures. A 1989 discretionary grant from the Corporation supported planning for the symposium. This grant was complemented by funds from Rutgers given in memory of Donald G. Herzberg, the original director of the Eagleton Institute and the founder of the seminars, and by in-kind contributions from the National Conference of State Legislatures.

Midwest/Northeast Voter Registration Education Project	\$50,000
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The Hispanic population in the United States is growing at a rapid rate and, of all minority populations, is one of the most underrepresented at the polls. This one-year grant supports the first phase of a study of the growth of the Hispanic population by the Midwest/Northeast Voter Registration Education Project, a nonpartisan organization established in 1982 to help increase the political participation of minorities. Executive director Juan Andrade, Jr., and project staff members are developing a data base using the most recent census information to determine the ways in which political districts must be redrawn to reflect more accurately the numbers of Hispanic voters — those who are registered and those who are eligible to register in future elections. The study is focused on Illinois, New Jersey, and New York, three states that have an estimated total of 1.5 million Hispanics not registered to vote. Project staff members are working closely with several community organizations, including the Mexican American Legal Defense and Educational Fund, in collecting and analyzing data.

Discretionary grants

<i>Center for National Independence in Politics</i> , toward support	\$25,000
<i>Clark Atlanta University</i> , for planning a program of technical assistance to black elected officials in Georgia	\$25,000
<i>Council for Court Excellence</i> , toward the dissemination and implementation of the recommendations of the Federal Courts Study Committee	\$25,000
<i>First Nations Financial Project</i> , toward support of a leadership and management fellowship program for American Indians	\$25,000
<i>Human SERVE Fund</i> , toward support	\$25,000
<i>National Academy of Public Administration Foundation</i> , toward support of an organizational consortium to further the recommendations of the National Commission on the Public Service	\$25,000
<i>Phelps-Stokes Fund</i> , toward publication and dissemination of the report of the New York State Judicial Commission on Minorities on biases in the court system	\$25,000

<i>People for the American Way</i> , toward the development of programs to promote civic participation among youth	\$25,000
<i>Population Reference Bureau</i> , for technical assistance to community organizations on the census of 1990 and reapportionment	\$25,000
<i>Southwest Voter Registration Education Project</i> , toward a project to increase Hispanic communities' participation in the redistricting process following the 1990 census	\$25,000
<i>Voter Education Project</i> , for planning activities commemorating the twenty-fifth anniversary of the passage of the Voting Rights Act of 1965	\$25,000

Conflict resolution

Brookings Institution	\$450,000
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In 1989 the Corporation made a grant to the Brookings Institution for a conference on conflict resolution in Africa. Following the conference, Brookings established a research program designed to increase understanding of conflicts on the continent and delineate methods by which they have been or could be satisfactorily resolved. This two-year grant is funding the program's initial effort: case studies of domestic and regional conflicts in southern Africa, the Horn of Africa (with an emphasis on the Sudan), and Nigeria. The three studies are being conducted by prominent local social scientists working with an international advisory committee of scholars and policymakers. It is hoped that the studies will provide insight not only into the issues but also lead to more general questions about conflict and its resolution within Africa. The project is codirected by Francis M. Deng, senior fellow in charge of Brookings' new Africa program, and John D. Steinbruner, the director of the Foreign Policy Studies Program. When completed, the case study monographs and a report that synthesizes their findings will be disseminated to researchers, policymakers, and others in Africa, North America, and Europe.

Emory University	\$250,000
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In 1989 more than 100 armed conflicts took place somewhere in the world. At least 90 percent of these conflicts were civil wars and other disputes within national borders, which no international organization is equipped to mediate. To help fill that gap, the Carter Center of Emory University in 1987 established the International Negotiation Network with Corporation support. Former President Jimmy Carter directs the network of former government leaders, ambassadors, and others experienced in conflict resolution. The network offers its mediation services directly to conflicting bodies or by assisting parties already engaged in mediation. Network members are endeavoring to devise a consistent, workable strategy for resolving internal conflicts and are producing publications and educational outreach programs on conflict resolution. The network collaborates with Uppsala

University in Sweden, the Peace Research Institute of Oslo, and Harvard University's Program on Negotiation. To date it has convened negotiation sessions on the Eritrean-Ethiopian conflict and organized peace talks between the government of Sudan and the Sudanese People's Liberation Movement, among other activities. The network is also funded by the Dana M. Greeley Foundation for Peace and Justice, the Ford Foundation, the Risho Kossei Kai Foundation of Japan, and the governments of Norway and Sweden.

Discretionary grants

<i>University of Michigan</i> , toward research and writing on militant white racism by Raphael S. Ezekiel	\$25,000
<i>Police Executive Research Forum</i> , toward a national conference on racial and cross-cultural conflict for law enforcement executives	\$25,000
<i>George Mason University</i> , toward a workshop on the future of Northern Ireland in post-1992 Europe	\$6,500

Philanthropy and nonprofit institutions

Columbia University	\$365,000
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Foundation archives are among the most important sources for researchers seeking to understand the work of philanthropic and nonprofit organizations. In recent years the number of scholars requesting access to Carnegie Corporation's archives has grown. Because the foundation's staff and offices are relatively small, its ability to guarantee the physical preservation of its records and make them fully accessible to researchers is limited. This three-year grant is enabling the archives to be transferred to Columbia University's Rare Book and Manuscript Library, where a number of collections relating to Andrew Carnegie's various philanthropic efforts already reside. The records, dating from the Corporation's founding in 1911 to 1977, will be stored along with the records of The Carnegie Foundation for the Advancement of Teaching, which was established by Andrew Carnegie in 1905, those of the Carnegie Endowment for International Peace from 1911 to 1954, and other related materials. The university is using the grant to establish an endowed position for an archivist, who will process the materials, service requests from researchers and other interested parties, and provide detailed information about the Carnegie materials. In turn, the university is contributing the materials and equipment needed for processing, clerical assistance, and a student trainee.

Council on Foundations	\$50,000
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Asian, Hispanic, African, and Native Americans are playing an increasingly significant role in American society. Last year the Council on Foundations, a national

membership organization of some 1,150 charitable institutions, initiated a program to promote wider participation by minority members in organized philanthropy. It is informing predominantly minority philanthropists about the full range of options for giving and educating the general public about the long history of minority philanthropy, which, on a percentage basis, often exceeds the charitable giving of middle- and upper-class whites. Under the direction of president James A. Joseph, the council is also encouraging its members to recruit minority members for their boards and professional staffs. It has identified 140 minority-operated foundations and is providing technical assistance to those that request it. The council devoted the May/June issue of the magazine *Foundation News* to minority giving and is producing articles and a newsletter on the subject. Staff members are distributing literature on the purposes and operating principles of organized philanthropy to members of minority groups across the nation and sponsoring minority-led regional meetings about establishing and contributing to community funds, among other activities. With this one-year grant the Corporation joins the Columbia, Wallace Alexander Gerbode, W.K. Kellogg, David and Lucile Packard, and Rockefeller foundations and the Lilly Endowment in support of the project.

Discretionary grants

<i>Independent Sector</i> , toward support of studies in leadership by John W. Gardner	\$25,000
<i>Council on Foundations</i> , toward 1990 membership support	\$24,700
<i>The Foundation Project</i> , toward support	\$20,000
<i>Independent Sector</i> , toward 1990 membership support	\$7,400
<i>New York Regional Association of Grantmakers</i> , toward 1990 membership support	\$7,125
<i>Nonprofit Coordinating Committee of New York</i> , toward 1990 membership support	\$975

Other

Southport Institute for Policy Analysis	\$200,000
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Since his departure as president of the Corporation in 1982, Alan Pifer has directed two major Corporation-funded efforts: the Aging Society Project, which examined the social, economic, political, and institutional implications of America's rapidly aging society; and the Project on the Federal Social Role, which sought to make recommendations about the nature of federal social responsibility in light of the major social and economic problems the nation will confront in the coming decades. Each project resulted in a book for general readers as well as numerous

scholarly reports. In 1987, with Corporation support, Pifer established the Southport Institute for Policy Analysis to continue work in these and other areas. This grant supports the institute for another two years. Among its current undertakings are studies of the federal role in promoting adult literacy (which has already produced an influential report, *Jump Start: The Federal Role in Adult Literacy*, by Forrest P. Chisman), and of the social and economic problems of older women who, on the average, live longer than men and have lower incomes. The latter will focus on three broad areas: work and family caregiving, health care and access, and the social and economic prospects of the growing population of older women (with particular attention to minority women). The work on aging women will be published as occasional papers that will later be collected into a book.

National Academy of Social Insurance

\$105,000

Social Security and Medicare together account for about one-half of all domestic expenditures by the federal government, yet these programs are not widely understood by the American people. Few colleges train students in the analysis of policy issues in social insurance. The few authorities who have served as principal spokespersons for social insurance over the past thirty or forty years are near retirement. To address these problems, the National Academy of Social Insurance was established in 1986 with Corporation support by a group of experts headed by Robert M. Ball, former U.S. Commissioner of Social Security. Since its founding, the academy has attracted a membership of 122, including representatives from business, labor, government, and academia. This grant supports the academy for another three years. Under the leadership of executive director Pamela J. Larson, it will create forums for the discussion of specific social insurance issues and hold panel discussions and an annual conference. It will conduct public education programs for key opinionmakers and faculty members from colleges and universities and will continue to serve as an information clearinghouse. Other funders include the New York Life Foundation, the Prudential Foundation, the AFL/CIO, and the American Association of Retired Persons.

Discretionary grants

<i>Interparliamentary Conference on the Global Environment</i> , toward participation by African parliamentarians	\$25,000
<i>Smithsonian Institution</i> , toward production of an educational videotape program of a conference on the global environment	\$25,000
<i>New York Academy of Medicine</i> , for planning a project to strengthen biomedical research and development in the metropolitan New York region	\$24,150

Publications and Nonprint Materials Resulting from Grants

The following print and nonprint materials resulting from projects funded wholly or in part by Carnegie Corporation were received in 1989-90. The list does not include papers published in journals, nor does it include newspaper and magazine articles or chapters in books.

Toward healthy child development: The prevention of damage to children

Adolescents at Risk: Prevalence and Prevention, by Joy G. Dryfoos (New York, NY: Oxford University Press)

Adventures in Excellence: A Summer Reading Program for Students and Teachers (Jackson, MS: The Southern Coalition for Educational Equity)

At the Threshold: The Developing Adolescent, edited by S. Shirley Feldman and Glen R. Elliott (Cambridge, MA: Harvard University Press)

Campus Partners in Learning Resource Manual for Campus-Based Youth Mentoring Programs, by Campus Compact/Campus Partners in Learning and the Education Commission of the States (Providence, RI: Campus Compact, c/o Brown University)

Carnegie Council on Adolescent Development Working Papers (Washington, DC: Carnegie Council on Adolescent Development):

Life Skills Training: Preventive Interventions for Young Adolescents, by Beatrix A. Hamburg

Popular Music in Early Adolescence, by Peter G. Christenson and Donald F. Roberts

Preventive Programs that Support Families with Adolescents, by Stephen A. Small
School and Community Support Programs that Enhance Adolescent Health and Education, by Richard H. Price, Madalyn Cioci, Wendy Penner, and Barbara Trautlein
Strategies for Enhancing Adolescents' Health through Music Media, by June A. Flora

The Child Care Guarantee in Welfare Reform (Denver, CO: Child Care Quality Project, National Conference of State Legislatures)

Choosing the Best in Children's Video, videotape (Chicago, IL: American Library Association)

Degrassi High: Discussion and Activity Guide, Term 4, accompanying the PBS television series for adolescents, produced by WGBH Boston (Boston, MA: WGBH Educational Foundation)

Family Policy: Recommendations for State Action, by the Children, Families, and Social Services Committee (Denver, CO: National Conference of State Legislatures)

Family Support, Education, and Involvement: A Guide for State Action (Washington, DC: Council of Chief State School Officers)

Five Million Children: A Statistical Profile of Our Poorest Young Citizens (New York, NY: National Center for Children in Poverty, Columbia University)

Head Start: The Nation's Pride, A Nation's Challenge, recommendations for Head Start in the 1990s, report of the Silver Ribbon Panel (Alexandria, VA: National Head Start Association)

Hispanic Education: A Statistical Portrait 1990, special conference edition, Policy Analysis Center, Office of Research, Advocacy, and Legislation (Washington, DC: National Council of La Raza)

Human Resources Policy Studies (Washington, DC: Center for Policy Research, National Governors' Association):

An Overview of State Policies Affecting Adolescent Pregnancy and Parenting, by Jeffrey J. Koshel

The State of the States' Children, by Lynne Fender and David Shaw

Knowing You've Made a Difference: Strengthening Campus-Based Mentoring Programs through Evaluation and Research, by Campus Compact: The Project for Public and Community Service and the Education Commission of the States (Providence, RI: Campus Compact, c/o Brown University)

Learning to Change: Schools of Excellence for At-Risk Students, videotape, with video discussion guide, produced by the Southern Regional Council and George King and Associates (Atlanta, GA: Southern Regional Council)

Linking College Students and At-Risk Youth: Strategies for Planning and Conducting Campus-Based Mentoring Programs, by Campus Compact: The Project for Public and Community Service and the Education Commission of the States (Providence, RI: Campus Compact, c/o Brown University)

Local Officials Guide to Family Day Care Zoning, a collaboration of the National League of Cities' Project on Children and Families in Cities with the Child Care Law Center (Washington, DC: National League of Cities)

Locked In/Locked Out: Tracking and Placement Practices in Boston Public Schools, report and executive summary (Boston, MA: Massachusetts Advocacy Center)

Mentoring Young People Makes a Difference, Youth at Risk series, by Patricia Flakus Mosqueda and Robert Palaich (Denver, CO: Education Commission of the States)

Middle Grades Reform in California: Current and Expected Attainment of Recommendations in "Caught in the Middle," Interim Evaluation: Technical Report One, prepared by Jana Kay Slater (Sacramento, CA: California Department of Education)

The Nation's Education Goals for the Year 2000: Lofty Vision, Daunting Challenge, discussion paper, Changing Domestic Priorities project, by Jason Juffras (Washington, DC: The Urban Institute)

National Conference of State Legislatures publications (Denver, CO: National Conference of State Legislatures):

1989-1990 Directory: Legislative Committees on Children, Youth, and Families

1989-1990 Directory: State Legislative Education Committees

1989 State Legislative Summary: Children, Youth, and Family Issues, Children, Youth, and Families Program

Past Caring, a history of U.S. preschool care and education for the poor, 1820-1965, by Emily D. Cahan (New York, NY: National Center for Children in Poverty, Columbia University)

School-Based Clinics Enter the '90s: Update, Evaluation, and Future Challenges, prepared and edited by Patricia Donovan and Cynthia S. Waszak (Washington, DC: Center for Population Options)

School Success for Limited English Proficient Students: The Challenge and State Response (Washington, DC: Resource Center on Educational Equity, Council of Chief State School Officers)

La Sexualidad: Curriculum Unit and *La Sexualidad: Student Workbook*, Latino Family Life Education Curriculum Series, by Elizabeth Raptis Picco (Santa Cruz, CA: Network Publications, a division of ETR Associates)

Strengthening the Role of Families in States' Early Intervention Systems, by the Mental Health Law Project, National Early Childhood Technical Assistance System, and the Division for Early Childhood of the Council for Exceptional Children (Reston, VA: Division for Early Childhood, The Council for Exceptional Children)

Talking with TV: A Guide for Grown-Ups and Kids, how to make TV a conversation starter on relationships, values, and sexuality (Washington, DC: Center for Population Options)

Who Cares? Child Care Teachers and the Quality of Care in America, final report and executive summary, National Child Care Staffing Study (Oakland, CA: Child Care Employee Project)

Education: Science, technology, and the economy

America's Choice: High Skills or Low Wages!, report of the Commission on the Skills of the American Workforce (Rochester, NY: National Center on Education and the Economy)

Assessment Alternatives in Mathematics, prepared by the EQUALS staff and the Assessment Committee of the California Mathematics Council's Campaign for Mathematics (Berkeley, CA: Lawrence Hall of Science, University of California)

Biotechnology: The Race and the Rewards, videotape (Washington, DC: Congressional Institute for the Future)

Charting a Course: Social Studies for the 21st Century, report of the Curriculum Task Force (Washington, DC: National Commission on Social Studies in the Schools)

Communicative Math and Science Teaching, videotape, produced by the Center for Applied Linguistics and the Media Group (Washington, DC: Center for Applied Linguistics)

Educating America: State Strategies for Achieving the National Education Goals, report of the Task Force on Education (Washington, DC: National Governors' Association)

Education that Works: An Action Plan for the Education of Minorities, report and summary (Cambridge, MA: Quality Education for Minorities Project, Massachusetts Institute of Technology)

Futures, with Jaime Escalante, videotape, twelve-part series/six tapes, produced by F.A.S.E. Productions (Los Angeles, CA: Foundation for Advancements in Science and Education)

Get It Together: Math Problems for Groups, Grades 4-12, by the EQUALS Project (Berkeley, CA: Lawrence Hall of Science, University of California)

Great Explorations in Math and Science (GEMS) Project (Berkeley, CA: Lawrence Hall of Science, University of California):

Buzzing a Hive, revised, teacher's guide, grades 1-3, by Jean C. Echols

Color Analyzers, teacher's guide, grades 5-9, by Cary Sneider and Cheryll Hawthorne

Crime Lab Chemistry, revised, teacher's guide, grades 4-8, by Jacqueline Barber

Earth, Moon, and Stars, revised, teacher's guide, grades 5-9, by Cary I. Sneider

Earthworms, teacher's guide, grades 6-10, by Robert C. Knott

Experimenting with Model Rockets, teacher's guide, grades 6-10, by Cary Sneider

Fingerprinting, revised, teacher's guide, grades 4-8, by Jeremy John Ahouse

Of Cabbages and Chemistry, teacher's guide, grades 4-8, by Jacqueline Barber

River Cutters, teacher's guide, grades 6-9, by Jefferey S. Kaufmann, Robert C. Knott, and Lincoln Bergman

Handbook for Achieving Sex Equity through Education, softcover edition, edited by Susan S. Klein (Baltimore, MD: The Johns Hopkins University Press)

Leadership for Literacy: The Agenda for the 1990s, by Forrest P. Chisman and Associates (San Francisco, CA: Jossey-Bass Publishers)

The Liberal Art of Science: Agenda for Action, report of the Project on Liberal Education and the Sciences (Washington, DC: American Association for the Advancement of Science)

The MIT Science and Engineering Program for High School Teachers, videotaped summary of June 1989 program (Cambridge, MA: Massachusetts Institute of Technology)

On the Shoulders of Giants: New Approaches to Numeracy, by the Mathematical Sciences Education Board of the National Research Council (Washington, DC: National Academy Press)

Planning for the Very Young: Excellence and Equity in Preschool Activities at Science Museums, sponsored by the Association of Science-Technology Centers and the Children's Museum of Boston, written by Dorothy Merrill, Jeri Robinson, and Diane Willow (Washington, DC: Association of Science-Technology Centers)

Popular Education and Its Discontents, by Lawrence A. Cremin (New York, NY: Harper & Row, Publishers)

Pre-Algebra Lexicon, by Dunstan Hayden and Gilberto Cuevas (Washington, DC: Center for Applied Linguistics)

Quality Education Project, information kit, including printed materials and a videotape (San Francisco, CA: Quality Education Project)

Reading Rainbow series (Lincoln, NE: Nebraskans for Public Television):

Reading Rainbow: A Guide for Teachers, programs 61-70

Science Comes Alive with Reading Rainbow, teacher's guide

Desert Giant: The World of the Saguaro Cactus, videotape, broadcast season VIII, closed captioned

Dive to the Coral Reefs, videotape, broadcast season VIII, closed captioned

Jack, the Seal, and the Sea, videotape, broadcast season VIII, closed captioned

The Magic School Bus inside the Earth, videotape, broadcast season VIII, closed captioned

Sunken Treasure, videotape, broadcast season VIII, closed captioned

The Reform of Teacher Education for the 21st Century: Project 30 Year One Report, by Frank B. Murray, University of Delaware, and Daniel Fallon, Texas A&M University (College Station, TX: Texas A&M University)

Science as a Way of Knowing, VI — Cell and Molecular Biology, Annual Meeting, December 1988, San Francisco, and *Science as a Way of Knowing, VII — Neurobiology and Behavior*, Centennial Meeting, December 1989, Boston, by the Committee on Education (Thousand Oaks, CA: American Society of Zoologists)

Science, Technology, and Government: A Crisis of Purpose?, symposium proceedings, University of California, San Diego, March 1988; and *Science, Technology, and Government: A Crisis of Purpose?*, videotape, by William A. Blanpied (San Diego, CA: University of California)

Sex Equity Handbook for Schools, second edition, by Myra Pollack Sadker and David Miller Sadker (Amherst, MA: Women Educators, University of Massachusetts)

Square One TV Program Listing: Seasons I, II, and III, featuring Mathnet case summaries (New York, NY: Children's Television Workshop)

State Actions to Restructure Schools: First Steps, Results in Education series, by Jane L. David *et al* (Washington, DC: Center for Policy Research, National Governors' Association)

Strengthening American Science and Technology: The Role of Minorities, analyses and recommendations for new and expanded partnerships (Washington, DC: Institute for Science, Space, and Technology, Howard University)

Thinking about Teaching?, a sourcebook (New York, NY: National Executive Service Corps)

Toward High and Rigorous Standards for the Teaching Profession, initial policies and perspectives of the National Board for Professional Teaching Standards, second edition (Detroit, MI: National Board for Professional Teaching Standards)

User Friendly: Hands-On Exhibits that Work, by Jeff Kennedy (Washington, DC: Association of Science-Technology Centers)

Voices for Evolution, edited by Betty McCollister (Berkeley, CA: The National Center for Science Education)

Strengthening human resources in developing countries

Africa Leadership Forum, discussions of the inaugural program, Ota, Nigeria, October 24 to November 1, 1988 (New York, NY: Africa Leadership Forum):

Case Studies of Nigeria (English and French editions), by Ojetunji Aboyade and Raji Rasaki

The Challenge of Education in Africa (English and French editions), by Alexander A. Kwapong

Development and Culture, by Wole Soyinka and Junzo Kawada

Development Strategies: Lessons from Experience (English and French editions), by Pierre-Claver Damiba, A.M.A. Muhith, and Donatien Bihute

The Interest of the Private Sector in Leadership (English and French editions), by A. Anantharaman and J.U. Aire

The Leadership Challenge for Improving the Economic and Social Situation of Africa (English and French editions), by Adebayo Adedeji and Tariq Husain

The Leadership Challenge in African Agricultural Production (English and French editions), by Akin L. Mabogunje

Leadership in an Interdependent World and What Is Expected from Africa (English and French editions), by Helmut Schmidt

An Alternative Development Model for the Caribbean, WAND Occasional Papers, "Alternatives" series, by Peggy Antrobus (St. Michael, Barbados: Women and Development Unit, University of the West Indies)

Challenges of Leadership in African Development and The Impact of Europe in 1992 on West Africa, edited by Olusegun Obasanjo and Hans d'Orville (New York, NY: Crane Russak, a member of the Taylor & Francis Group)

Cooperation for International Development: The United States and the Third World in the 1990s, edited by Robert J. Berg and David F. Gordon (Boulder, CO: Lynne Rienner Publishers)

Education: From Poverty to Liberty, report for the Second Carnegie Inquiry into Poverty and Development in Southern Africa, edited by Bill Nasson and John Samuel (Claremont, South Africa: David Philip Publishers [Pty] Ltd)

Health Research: Essential Link to Equity in Development, by the Commission on Health Research for Development (New York, NY: Oxford University Press)

Medical Education in Africa: An Agenda for Change, incorporating the Abuja Plan of Action, highlights of an African ministerial consultation, Abuja, Nigeria, July 4-7, 1989, English and French editions (Lagos, Nigeria: World Federation for Medical Education)

The Mind of South Africa, by Allister Sparks (New York, NY: Alfred A. Knopf, subsidiary of Random House)

National PPHC Network Conference Proceedings '89, edited by C.C. Jinabhai and W. Shasha (Durban, South Africa: National Progressive Primary Health Care Committee)

The Partograph: A Managerial Tool for the Prevention of Prolonged Labour, Section III: Facilitator's Guide, and *The Partograph: A Managerial Tool for the Prevention of Prolonged Labour*, Section IV: Guidelines for Operations Research on the Application of the Partograph, various United Nations language editions (Geneva, Switzerland: Maternal and Child Health & Family Planning Programme, Division of Family Health, World Health Organization)

South African Information Exchange Working Papers (New York, NY: Institute of International Education):

International Assistance to South African Exiles and Refugees: A Reference Guide, by Ann McKinstry Micou and Jane P. Draper

Project Funding by Foreign Embassies within South Africa, by Ann McKinstry Micou

Skills Training in South Africa: Nonformal, Nongovernmental, Nonprofit, Accessible to the Community, by Ann McKinstry Micou

Some Sources for Tertiary-level Bursaries within South Africa: A Matrix, by Ann McKinstry Micou

U.S. Church-Related Funding for Change in South Africa: An Analysis and an Inventory, by Ann McKinstry Micou

The Southern Africa Policy Forum: Second Conference, August 14-17, 1989, and The Southern Africa Policy Forum: Third Conference, April 12-15, 1990, convened by Dick Clark (Queenstown, MD: The Aspen Institute)

Women's Perspectives on Maternal Mortality and Morbidity, Safe Motherhood, Nigeria, 1990, views and issues from four zonal seminars (New York, NY: Family Care International)

Avoiding nuclear war

Accidental Nuclear War, proceedings of the Eighteenth Pugwash Workshop on Nuclear Forces, Canadian Papers in Peace Studies, 1990 Special Issue (Downsview, Ontario, Canada: Samuel Stevens & Co, University of Toronto Press)

After the Cold War and An Interview with George F. Kennan, reprint from *The New York Times Magazine*, February 5, 1989, by George F. Kennan, and transcript of interviews from "The MacNeil/Lehrer NewsHour," December 21 and 23, 1988 (Washington, DC: American Committee on U.S.-Soviet Relations)

Agenda for Action: African-Soviet-U.S. Cooperation, edited by Anatoly A. Gromyko and C.S. Whitaker (Boulder, CO: Lynne Rienner Publishers)

American Committee on U.S.-Soviet Relations Occasional Papers Series (Washington, DC: American Committee on U.S.-Soviet Relations):

Address of Eduard A. Shevardnadze at the 20th Conference of the Party Organization of the Ministry of Foreign Affairs of the U.S.S.R., November 1, 1988, from *The Bulletin of the Ministry of Foreign Affairs of the U.S.S.R.*, December 1, 1988, translated and with an introduction by William F. Brazier

"Masters of the Land"?: The Dilemmas of Agricultural Reform in the Soviet Union, by Eric F. Green

The Political Economy of Environmental Protection in the Soviet Union, by Eric F. Green

Restructuring Ethnic Relations in the Soviet Union: Debates on the Draft Nationalities Program, edited and with an introduction by Gerald M. Easter

The Soviet Defense Debate: A Review Essay, edited and with an introduction by Linton H. Bishop

Soviet Integration into the World Economy: A Long-Range View, by Eric F. Green

Aspen Strategy Group Reports (Lanham, MD: University Press of America):

Balancing National Security Objectives in an Uncertain World

New Threats: Responding to the Proliferation of Nuclear, Chemical, and Delivery Capabilities in the Third World

Assuring Peace in a Changing World: Critical Choices for the West's Strategic and Arms Control Policies, Johns Hopkins Foreign Policy Institute of the Paul H. Nitze School of Advanced International Studies, by Lynn Etheridge Davis (Lanham, MD: University Press of America)

Can Gorbachev's Reforms Succeed?, Berkeley-Stanford Program in Soviet Studies, edited by George W. Breslau (Berkeley, CA: Center for Slavic and East European Studies, University of California)

Challenges for the 1990s for Arms Control and International Security, by the Committee on International Security and Arms Control, National Academy of Sciences (Washington, DC: National Academy Press)

Commercial Observation Satellites and International Security, a Carnegie Endowment book, edited by Michael Krepon *et al* (New York, NY: St. Martin's Press)

Controlling the Sword: The Democratic Governance of National Security, by Bruce Russett (Cambridge, MA: Harvard University Press)

Defense Investment: A Strategy for the 1990s, by William J. Perry (Stanford, CA: Center for International Security and Arms Control, Stanford University)

Glasnost, Perestroika, and U.S. Defense Spending, Studies in Defense Policy, by William W. Kaufmann (Washington, DC: The Brookings Institution)

Guardians of the Arsenal: The Politics of Nuclear Strategy, by Janne E. Nolan (New York, NY: A New Republic Book, Basic Books, Inc., Publishers)

The Helsinki Process and the Future of Europe, special studies of the Woodrow Wilson International Center for Scholars, edited by Samuel F. Wells, Jr. (Washington, DC: The Wilson Center Press)

Helsinki Watch Reports (New York, NY: Helsinki Watch):

Nyeformaly: Civil Society in the U.S.S.R.

Toward the Rule of Law: Soviet Legal Reform and Human Rights under Perestroika

Inside Gorbachev's U.S.S.R., videotape, four-part series, produced by WGBH and Martin Smith Productions (Boston, MA: WGBH Educational Foundation)

Institute for East-West Security Studies Occasional Paper Series (Boulder, CO: Westview Press):

Challenges of Verification: Smaller States and Arms Control, by Heinz Gaertner
The Guns Fall Silent: The End of the Cold War and the Future of Conventional Disarmament, edited by Ian M. Cuthbertson and Peter Volten

International Foundation for the Survival and Development of Humanity publications (Washington, DC: The International Foundation):

Building Democratic Institutions: New Soviet Legislators Study the Theory and Practice of American Government, a report
Energy Efficiency and the Global Environment, a paper prepared by Tim Duane and Bill Keepin
Protection of the Environment: A Call for Global Leadership, a working paper
Reducing the Dangers of Accidental and Unauthorized Nuclear Launch and Terrorist Attack: Alternatives to a Ballistic Missile Defense System, a report

Journal of Soviet Nationalities, Volume One, Number One, a quarterly publication of the Center on East-West Trade, Investment, and Communications (Durham, NC: Duke University)

Mutual Security as a Policy Tool, a joint paper of the Project on Mutual Security (Providence, RI: Center for Foreign Policy Development, Brown University; Moscow, U.S.S.R.: Institute for the U.S.A. and Canada, U.S.S.R. Academy of Sciences)

New Weapons, Old Politics: America's Military Procurement Muddle, by Thomas L. McNaugher (Washington, DC: The Brookings Institution)

Nuclear Weapons Databook Working Papers (Washington, DC: Natural Resources Defense Council):

Making a Virtue of Necessity: START and Strategic Modernization, by Robert Standish Norris and Thomas B. Cochran
Soviet Nuclear Warhead Production, by Thomas B. Cochran and Robert Standish Norris
U.S.-U.S.S.R. Strategic Offensive Nuclear Forces 1946-1989, by Robert Standish Norris and Thomas B. Cochran

Perspectives on Deterrence, by the Committee on Contributions of Behavioral and Social Science to the Prevention of Nuclear War, Commission on Behavioral and Social Sciences and Education, National Research Council (New York, NY: Oxford University Press)

Program on Science, Arms Control, and National Security publications (Washington, DC: American Association for the Advancement of Science):

Conventional Arms Control and European Security, proceedings from a congressional seminar, March 9, 1989, Washington, DC

Implementing a Global Chemical Weapons Convention, proceedings from a 1989 Annual Meeting symposium, January 16, 1989, San Francisco, California

The Implications of Soviet New Thinking for International Security, proceedings from a symposium at the AAAS Annual Meeting, January 1989, San Francisco, California

New Technologies for Security and Arms Control: Threats and Promise

Science and Security: Technology Advances and the Arms Control Agenda, 1989 colloquium proceedings, Fourth Annual AAAS Colloquium on Science, Arms Control, and National Security, November 16-17, 1989, Washington, DC

Science and Security: Technology and Arms Control for the 1990s, colloquium proceedings, October 13-14, 1988, Washington, DC

U.S. Strategic Forces: Modernization under Arms Control and Budget Constraints, proceedings from a congressional seminar, June 1, 1989, Washington, DC

A Proposal for a Ban on Nuclear SLCMs of All Ranges, a special report, by George N. Lewis, Sally K. Ride, and John S. Townsend (Stanford, CA: Center for International Security and Arms Control, Stanford University)

The RAND Publications Series (Santa Monica, CA: The RAND Corporation):

Crisis De-Escalation: A Relevant Concern in the "New Europe"?, a RAND Note, by James A. Winnefeld

Superpower Crises in a Less Confrontational World: Results of an Experimental Simulation, a RAND Note, by Preston Niblack and Arnold Kanter

U.S. Interests and Intervention in the Nuclear Age, a RAND Report, by Robert A. Levine

Soviet Crisis Decision-Making and the Gorbachev Reforms, Occasional Paper, reprinted from *Survival*, Volume Thirty-One, Number Four, July/August 1989, by Jeffrey Legro

Reversing the Arms Race: How to Achieve and Verify Deep Reductions in the Nuclear Arsenals, Science and Global Security Monograph Series, Volume One, edited by Frank von Hippel and Roald Z. Sagdeev (New York, NY: Gordon and Breach Science Publishers)

The Search for Security in Space, Cornell Studies in Security Affairs, edited by Kenneth N. Luongo and W. Thomas Wander (Ithaca, NY: Cornell University Press)

Soviet Observer, analytical, serial graduate student publication, Volume One, Number One (New York, NY: The W. Averell Harriman Institute for Advanced Study of the Soviet Union, Columbia University)

Soviet Science on the Edge of Reform, Westview Special Studies on the Soviet Union and Eastern Europe, by Harley D. Balzer (Boulder, CO: Westview Press)

Soviet-American Dialogue in the Social Sciences: Research Workshops on Interdependence among Nations, by the Committee on Contributions of Behavioral and Social Science to the Prevention of Nuclear War, Commission on Behavioral and Social Sciences and Education, National Research Council (Washington, DC: National Academy Press)

Still the Arms Debate, a RAND Corporation research study, by Robert A. Levine (Brookfield, VT: Gower Publishing Company)

Toward a More Civil Society? The U.S.S.R. under Mikhail Sergeevich Gorbachev, an assessment by the American Committee on U.S.-Soviet Relations, edited by William Green Miller (New York, NY: Ballinger Publishing Company, a division of Harper & Row, Publishers)

The United Nations in Conflict Management: American, Soviet, and Third World Views, edited by Thomas G. Weiss (New York, NY: International Peace Academy)

The U.S. Stake in Naval Arms Control, Pragmatic Steps toward Ideal Objectives, by Barry M. Blechman *et al* (Washington, DC: The Henry L. Stimson Center)

United States-Soviet Relations: Building a Congressional Cadre: Sixth Conference, August 26-September 1, 1989 and United States-Soviet Relations: Building a Congressional Cadre: Seventh Conference, January 10-15, 1990, convened by Dick Clark (Queenstown, MD: The Aspen Institute)

View from the Decision Makers, Significant Issues Series, Volume Eleven, Number Nine, Program in Arms Control, Science, and Technology, edited by Debra van Opstal (Washington, DC: The Center for Strategic and International Studies)

Special projects

ALA Video Catalog 1990, a listing of top quality videos for public programing, circulation, and staff development (Chicago, IL: American Library Association)

Alternative Agriculture, by the Committee on the Role of Alternative Farming Methods in Modern Production Agriculture, Board on Agriculture, National Research Council (Washington, DC: National Academy Press)

The Americas in 1989: Consensus for Action, a report of the Inter-American Dialogue, under the auspices of the Aspen Institute (Washington, DC: The Inter-American Dialogue)

Carnegie Commission on Science, Technology, and Government Reports (New York, NY: Carnegie Commission on Science, Technology, and Government):

E³: Organizing for Environment, Energy, and the Economy in the Executive Branch of the U.S. Government, by the Task Force on Environment and Energy

New Thinking and American Defense Technology

Choosing to Participate: A Critical Examination of Citizenship in American History, by Alan L. Stoskopf and Margot Stern Strom (Brookline, MA: Facing History and Ourselves National Foundation)

Community Foundations: At the Margin of Change — Unrealized Potential for the Disadvantaged (Washington, DC: National Committee for Responsive Philanthropy)

Improving Risk Communication, by the Committee on Risk Perception and Communication, Commission on Physical Sciences, Mathematics, and Resources, Commission on Behavioral and Social Sciences and Education, National Research Council (Washington, DC: National Academy Press)

In the U.S. Interest: Resources, Growth, and Security in the Developing World, a World Resources Institute book, edited by Janet Welsh Brown (Boulder, CO: Westview Press)

National Commission on the Public Service publications (Washington, DC: National Commission on the Public Service):

Public Service Perspectives: Reflections on Government Service by American Leaders from the Private Sector

The State of Merit in the Federal Government, occasional paper prepared by Patricia W. Ingraham and David H. Rosenbloom

A Survey of Intern Programs in the Federal Government, study prepared by John P. Knight

Patterns of Growth in Private Foundations, introduction to *The Foundation Directory*, Edition Twelve, prepared by Loren Renz, Elan Garonzik, and Margaret Mary Fezcko (New York, NY: The Foundation Center)

The Politics of Knowledge: The Carnegie Corporation, Philanthropy, and Public Policy, by Ellen Condliffe Lagemann (Middletown, CT: Wesleyan University Press)

Post World War II International Relations as a Component of General Education Programs in American Colleges and Universities (Washington, DC: The Atlantic Council of the United States)

Remedial Law: When Courts Become Administrators, by Robert C. Wood (Amherst, MA: The University of Massachusetts Press)

Shaping the Future: Biology and Human Values, sponsored by the Board on Biology of the Commission on Life Sciences, National Research Council, written by Steve Olson (Washington, DC: National Academy Press)

Super Chief: The Life and Legacy of Earl Warren, videotape and film, produced by Quest Productions (Berkeley, CA: The Catticus Corporation)

Teacher Magazine, premier issue (Washington, DC: Editorial Projects in Education)

Former grant programs

On Leadership, by John W. Gardner (New York, NY: The Free Press, a division of Macmillan, Inc.)

The Rise and Fall of the Plantation Complex: Essays in Atlantic History, by Philip D. Curtin (New York, NY: Cambridge University Press)

Report on Finance and Administration



Report of the Treasurer

The annual financial statements and additional financial tabulations for Carnegie Corporation of New York appear on pages 124 through 174. The following comments and data supplement that information.

Investments

On September 30, 1990, the market value of the Corporation's investments was \$829.1 million, compared with \$891.0 million on September 30, 1989, and \$345.5 million on September 30, 1980. This is an increase of about 140 percent in ten years. Adjusted for inflation, and after allowing for expenses, the increase over the last ten years has been a real return of 5.1 percent compounded annually. During this period, the trustees authorized \$330.0 million for grants, administrative expenses, and federal taxes.

The Corporation's principal investment objective is to achieve long-term total return, consisting of capital appreciation as well as dividend and interest income, sufficient to maintain the purchasing power of the endowment while continuing to support the programs of the Corporation. To monitor performance in connection with this objective, monthly and annual indices of total return on the portfolio are calculated. The index shows a total return of -3.2 percent for the fiscal year ended September 30, 1990. The annual rate of return over the last ten years has been 14.9 percent, compounded annually. In terms of dollars of constant purchasing power, the total return over the last ten years has been 10.1 percent, compounded annually. Since the Corporation has on average paid out 5 percent each year in that period, the Corporation has added 5.1 percent real return to the portfolio for each of those years.

The table below shows the composition of investment assets on September 30, 1990.

Investment assets on September 30, 1990

	Market value	Percent of total	Prior year percent of total
Equities			
Common stocks	\$277,874,613	33.5	38.2
Convertible securities	7,186,956	.9	1.0
Fixed-income securities			
Short term	25,485,180	3.1	12.2
Intermediate and long term	335,765,217	40.5	30.7
Limited partnerships	164,164,470	19.8	16.3
Other	18,645,148	2.2	1.6
	<u>\$829,121,584</u>	<u>100.0</u>	<u>100.0</u>

The Corporation's trustees delegate investment decisions to investment managers who operate within investment policies and standards set by the trustees. Seventy-five percent of the funds are managed by three core managers who may invest in both fixed-income securities and equities, domestic and international. The remaining 25 percent of the funds are invested by managers who specialize in particular types of investments — special equities, global fixed income, venture capital, and real estate. The finance and administration committee of the board of trustees meets periodically with the core managers.

In August 1989, the committee requested the core managers to reduce the percentage of assets held in equities to less than 50 percent. At September 30, 1990, 46% of the assets held by the core managers was invested in equity securities.

During the 1985 fiscal year, the Corporation authorized its managers to invest in foreign securities, with the objective of enhancing the overall rate of investment return. On September 30, 1990, approximately 13.7 percent of the Corporation's investment assets was invested in foreign securities and currencies.

While delegating authority for individual investment decisions to outside managers, the trustees retain ultimate responsibility for investment policy, including policy relating to the public responsibilities of the corporations represented in the investment portfolio.

Fixed assets

The Corporation capitalizes purchases of fixed assets. Fixed assets include leasehold improvements, furniture, and equipment. Furniture and equipment is depreciated when placed in service, based on useful life. Leasehold improvements are amortized when placed in service, over the remaining life of the lease. Fixed assets net of accumulated depreciation and amortization totaled \$4,018,436 at September 30, 1990.

Income

The gross income from investments for the year ended September 30, 1990, was \$65,118,668, compared with \$64,409,449 the preceding year. In fiscal year 1989, the Corporation adopted the accrual basis of accounting for investment income. This resulted in the recognition of additional income of \$8,622,470 in 1989. Investment expenses, consisting primarily of asset management fees, amounted to \$2,777,906 in the fiscal year ended September 30, 1990. Net investment income, when combined with other income, produced total income of \$62,370,926.

Appropriations and expenses

Each year, the trustees appropriate funds to be used for grants and for projects administered by the officers. Because many of the grants involve multi-year commitments, about one-half of the appropriated funds are spent in years subsequent to the fiscal year in which the original appropriation is made. A total of \$44,757,286 was appropriated in the fiscal year ended September 30, 1990.

Any balance held by a grantee after a project has been completed or terminated is refunded to the Corporation. If the balance has not been distributed to the

grantee, it is cancelled by the Corporation. Refunds and cancellations are listed on page 174 as adjustments of appropriations. For the year ended September 30, 1990, they totaled \$635,646. Net appropriations, therefore, were \$44,121,640. A complete list of grants and other appropriations is shown on pages 130 to 173.

The general administration and program management expenses were \$7,213,785 in the fiscal year ended September 30, 1990, compared with \$5,800,946 in the previous fiscal year. Amounts spent for "direct charitable activities" were \$2,187,188 in 1990 and \$1,939,383 in 1989. These activities constitute services provided directly to other exempt organizations, governmental bodies, or the general public. Examples of such services are the provision of technical assistance to grantees and potential grantees; the conduct of educational conferences; research; the publication and dissemination of educational materials; and service on boards of other charitable organizations or public commissions.

The schedule below shows a breakdown of total expenses into general administration and program management expenses, investment expenses, and direct charitable activities expenses.

Schedule of general administration and program management expenses, investment expenses, and direct charitable activities expenses for the year ended September 30, 1990.

	General administration and program management expenses	Investment expenses	Direct charitable activities expenses	Total
Salaries	\$2,917,593	\$ 113,112	\$ 940,238	\$ 3,970,943
Investment advisory and custody fees	—	2,520,791	—	2,520,791
Employee benefits	1,099,143	43,101	347,272	1,489,516
Rent	1,103,181	44,756	348,917	1,496,854
Conferences and meetings	178,673	202	31,797	210,672
Consultants	248,454	—	67,361	315,815
Quarterly and annual reports	63,000	—	239,433	302,433
Amortization and depreciation	508,078	—	—	508,078
Travel	298,190	779	79,505	378,474
Postage, telephone and messenger services	148,939	6,043	47,138	202,120
Legal and accounting services	77,448	29,896	—	107,344
Office equipment, supplies and service	147,089	6,624	47,155	200,868
Trustees' honoraria and expenses	255,168	7,778	—	262,946
Computer equipment and services	53,956	2,189	17,065	73,210
Books and periodicals	21,231	867	6,902	29,000
Copying and duplicating	28,149	1,143	8,921	38,213
Membership fees and association dues	8,594	374	3,528	12,496
Insurance	50,715	—	—	50,715
Miscellaneous	6,184	251	1,956	8,391
Total	<u>\$7,213,785</u>	<u>\$2,777,906</u>	<u>\$2,187,188</u>	<u>\$12,178,879*</u>

*Total expenses in 1989 were \$10,405,806 which included \$2,665,477 of investment expenses and \$1,939,383 of direct charitable activities expenses.

Under the provisions of the Tax Reform Act of 1969, Carnegie Corporation and other private foundations are subject to a federal excise tax of 2 percent on income and realized capital gains. However, under the Tax Reform Act of 1984, the rate is reduced to 1 percent if the foundation maintains its average expense rate of the previous five years and, in addition, spends the savings — 1 percent of income and realized capital gains. The Corporation qualified for the reduced rate in fiscal year 1990. The tax savings are estimated to be \$.86 million. In accordance with the provisions of the Tax Reform Act of 1984, the Corporation has paid estimated taxes. Prepaid taxes, representing the excess of estimated taxes over the taxes due, are carried as an asset. Taxes on investment income are charged to the income fund, and taxes on realized capital gains are charged to the principal fund. The balance sheet on page 124 shows a deferred tax liability of \$203,230, representing the potential tax (at 2 percent) on gains as yet unrealized.

Ten-year financial summary

The table below sets forth the growth of investment assets, income, appropriations, and other expenses over the ten fiscal years ended September 30, 1990. The significant rise in the market value of investment assets over the past ten fiscal years has provided the basis for substantive increases in appropriations during this period.

Ten-year financial summary (in thousands)

Fiscal year ended September 30	Market value of investments at year end	Total income	Appropriations for grants and projects — net	Other expenses*
1990	\$829,122	\$62,371	\$44,122	\$9,429
1989	891,033	61,766	39,306	7,992
1988	800,417	45,023	38,737	6,249
1987	806,296	37,273	39,432	5,596
1986	713,489	34,505	28,686	5,132
1985	564,385	34,966	26,134	5,085
1984	503,943	30,986	19,535	4,231
1983	515,709	27,170	13,231	3,921
1982	380,699	21,875	14,342	3,596
1981	334,999	17,149	12,146	3,075

**Includes direct charitable activities; excludes investment expenses, depreciation, and amortization.*

Audit by independent accountants

The bylaws provide that the Corporation's accounts are to be audited each year by an independent public accountant. Accordingly, the firm of KPMG Peat Marwick audited the Corporation's financial statements for the fiscal year ended September 30, 1990. The Corporation's financial statements and related schedules, together with the independent auditors' report, appear on the following pages.

Independent auditors' report

The Board of Trustees
Carnegie Corporation of New York:

We have audited the accompanying balance sheets of Carnegie Corporation of New York as of September 30, 1990 and 1989, and the related statements of changes in fund balances for the years then ended. These financial statements are the responsibility of the Corporation's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Carnegie Corporation of New York as of September 30, 1990 and 1989, and the changes in its fund balances for the years then ended in conformity with generally accepted accounting principles.

Our audits were made for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplementary information included in the schedules on pages 129 to 174 is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information has been subjected to the auditing procedures applied in the audits of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

KPMG Peat Marwick

New York, New York
December 27, 1990

Balance sheets

September 30, 1990 and 1989

	1990	1989
Assets		
Investments, at market		
Equities	\$285,061,569	\$348,316,717
Fixed income	361,250,397	382,768,740
Limited partnership interests	164,164,470	145,451,506
Other	18,645,148	14,496,071
	<u>829,121,584</u>	<u>891,033,034</u>
Cash	568,104	554,078
Accrued investment income — note 1	8,688,836	8,622,470
Due from broker (net)	2,083,091	—
Prepaid taxes	238,205	89,641
Accounts receivable and other prepaid expenses	238,942	62,636
Program-related investments — note 2	311,603	334,647
Fixed assets — note 6	4,018,436	4,409,807
Total assets	<u>\$845,268,801</u>	<u>\$905,106,313</u>
Liabilities and fund balances		
Liabilities		
Unpaid appropriations	\$ 21,515,265	\$ 24,150,228
Accounts payable and other liabilities	1,237,071	976,843
Due to brokers (net)	—	6,982,427
Deferred taxes payable — note 3	203,230	1,875,940
Total liabilities	<u>\$ 22,955,566</u>	<u>\$ 33,985,438</u>
Fund balances		
Income	—	—
Principal	<u>\$822,313,235</u>	<u>\$871,120,875</u>
Total fund balances	<u>\$822,313,235</u>	<u>\$871,120,875</u>
Total liabilities and fund balances	<u>\$845,268,801</u>	<u>\$905,106,313</u>

See accompanying notes to financial statements.

Statements of changes in fund balances

for the years ended September 30, 1990 and 1989

Income fund	1990	1989
Income		
Investment income — note 1	\$ 65,118,668	\$ 64,409,449
Less investment expenses	<u>2,777,906</u>	<u>2,665,477</u>
Net investment income	62,340,762	61,743,972
Other	<u>30,164</u>	<u>22,512</u>
Total income	<u>62,370,926</u>	<u>61,766,484</u>
Expenses		
Grant appropriations (net of refunds and cancellations of \$632,589 in 1990 and \$209,974 in 1989)	41,351,254	37,087,461
Appropriations for projects administered by officers (net of refunds and cancellations of \$3,057 in 1990 and \$472,031 in 1989)	2,770,386	2,218,568
General administration, program management, and direct charitable activities	9,400,973	7,740,329
Provision for taxes — note 3	558,961	511,150
Provision for losses and write-offs of program-related investments — note 2	<u>(23,044)</u>	<u>29,514</u>
Total expenses	<u>54,058,530</u>	<u>47,587,022</u>
Excess of income over expenses	<u>\$ 8,312,396</u>	<u>\$ 14,179,462</u>
Transfer to principal fund	<u>\$ (8,312,396)</u>	<u>\$(14,179,462)</u>

continued

See accompanying notes to financial statements.

Statements of changes in fund balances
for the years ended September 30, 1990 and 1989, continued

Principal fund	1990	1989
Expendable:		
Balance at beginning of year	\$735,784,007	\$637,698,722
Additions and deductions		
Net realized gain on investment transactions	24,183,527	44,312,045
Net realized gain on recovery of reversionary interests	3,460	3,571
Less applicable taxes — note 3	(454,523)	(561,433)
Unrealized appreciation (depreciation) of investments net of deferred federal excise tax (credit) of \$(1,650,051) in 1990 and \$819,421 in 1989 — note 3	(80,852,500)	40,151,640
Transfer from income fund	8,312,396	14,179,462
Total expendable, end of year — note 1	<u>686,976,367</u>	<u>735,784,007</u>
Nonexpendable (balance at beginning and end of year):		
Endowment	125,000,000	125,000,000
Legacy	<u>10,336,868</u>	<u>10,336,868</u>
Total nonexpendable — note 1	<u>135,336,868</u>	<u>135,336,868</u>
Total principal fund balance	<u><u>\$822,313,235</u></u>	<u><u>\$871,120,875</u></u>

See accompanying notes to financial statements.

Notes to financial statements

for the years ended September 30, 1990 and 1989

(1) Summary of significant accounting policies:

The accompanying financial statements have been prepared on the accrual basis of accounting. In fiscal year 1989, the Corporation adopted the accrual basis of accounting for investment income. This change resulted in the recognition of additional investment income of \$8,622,470 in fiscal 1989.

Fixed assets are stated at cost. Depreciation is calculated on a straight-line basis over the estimated lives of the related assets. Leasehold improvements are amortized over the remaining life of the lease.

The resources of the Corporation are accounted for in two funds — income and principal. The principal fund consists of nonexpendable and expendable resources. Nonexpendable resources represent the original sums received from Andrew Carnegie who, by the terms of the conveying instrument, stipulated that the principal may never be expended. Expendable resources represent net gains on investment transactions and reversionary interests which are available to support activities in accordance with the provisions of the New York State Not-for-Profit Corporation Law.

(2) Program-related investments:

The Corporation has made investments in loans to nonprofit organizations, the purpose of such investments being to accomplish one or more of the purposes for which the Corporation is organized and operated.

Due to the risk involved in these investments, the Corporation estimates the collectability of these amounts to be approximately 50 percent of the remaining loan amount and, accordingly, such investments are presented on the accompanying balance sheets net of allowance for possible losses of \$311,603 in 1990, and \$334,647 in 1989.

(3) Taxes payable:

The Corporation is liable for federal excise taxes of 2 percent of the net investment income, as defined, which includes realized capital gains for the year. However, this tax is reduced to 1 percent if certain conditions are met. Therefore, current taxes for the years ended September 30, 1990 and 1989, are estimated at 1 percent of net investment income, as defined.

Deferred taxes represent 2 percent of unrealized appreciation on investments for the years ended September 30, 1990 and 1989, as qualification for the 1 percent tax is not determinable until the fiscal year in which gains are realized.

The Corporation is also subject to unrelated business income tax, which is calculated based on applicable corporate tax rates.

Tax expense is allocated to the respective funds based on the taxable income generated by the funds.

Notes to financial statements

for the years ended September 30, 1990 and 1989, continued

(4) Retirement plans:

The Corporation purchases annuities for qualifying employees under the terms of a noncontributory, defined contribution retirement plan with Teachers Insurance and Annuity Association and College Retirement Equities Fund. Retirement plan expenses for the years ended September 30, 1990 and 1989, were \$580,611 and \$520,773, respectively.

In addition, the Corporation has established a noncontributory annuity plan to supplement the basic plan described above. This plan is also administered by Teachers Insurance and Annuity Association and College Retirement Equities Fund. The contribution in the fiscal year ended September 30, 1990, to this plan for the plan year beginning January 1, 1989, was \$91,900.

(5) Lease:

The Corporation has entered into a ten-year sublease agreement to occupy two new floors at its present location at 437 Madison Avenue.

The following is a schedule of the minimum future lease payments at September 30, 1990:

Minimum future lease payments:

1991	\$1,314,690
1992	1,318,815
1993	1,335,315
1994	1,347,690
1995	1,351,815
1996-1998	<u>3,143,678</u>
	<u>\$9,812,003</u>

Rental expense for 1990, which includes the payment for the new space as well as rent for the space previously occupied, was \$1,409,131. Rental expense for 1989 was \$922,020.

(6) Fixed assets:

Fixed assets are composed of the following at September 30, 1990 and 1989:

	<u>1990</u>	<u>1989</u>
Leasehold improvements	\$3,697,267	\$3,686,450
Furniture and equipment	<u>1,123,427</u>	<u>1,017,538</u>
	4,820,694	4,703,988
Less: Accumulated amortization and depreciation	<u>(802,258)</u>	<u>(294,181)</u>
Total	<u>\$4,018,436</u>	<u>\$4,409,807</u>

Schedule of investments held and income from investments*

for the year ended September 30, 1990

	Tax basis**	Market value	Excess (deficiency) of market value over tax basis	Income
Equities				
Common stocks	\$273,836,024	\$277,874,613	\$ 4,038,589	\$ 8,749,061
Convertible securities	9,228,445	7,186,956	(2,041,489)	628,399
Fixed-income securities				
Short term	25,488,961	25,485,180	(3,781)	5,974,276
Intermediate and long term	338,120,607	335,765,217	(2,355,390)	27,109,337
Limited partnership interests	153,895,355	164,164,470	10,269,115	22,567,654
Other	18,432,818	18,645,148	212,330	89,941
	<u>\$819,002,210</u>	<u>\$829,121,584</u>	<u>\$10,119,374</u>	<u>\$65,118,668</u>

* A complete listing of securities is available upon written request.

** Tax basis is cost, except for limited partnership investments, which are at equity.

Schedule of appropriations and payments

Recipient and/or purpose	Allocated or appropriated during year	Unpaid at beginning of year	Paid during year	Unpaid at end of year
Academy for Educational Development 100 Fifth Avenue New York, New York 10011 <i>Adolescent pregnancy prevention program for urban middle schools — \$257,900 (1989)</i>		107,900	107,900	
ACCESS: A Security Information Service 1730 M Street, N.W. Washington, D.C. 20036 <i>Security information service</i>	250,000		125,000	125,000
Action in International Medicine 46 Cleveland Street London W1P 6DB, England <i>Support</i>	25,000		25,000	
Ad Hoc Soviet Research Group for a U.S.-Soviet Project on the Educational Uses of Computers in the Early Elementary Grades Academy of Sciences of the USSR Moscow, Union of Soviet Socialist Republics <i>Expenses of the project — \$25,000 (1988)</i>		1,864	158	1,706
Africa Fund 198 Broadway New York, New York 10038 <i>Public television series "South Africa Now"</i>	100,000		100,000	
Africa Leadership Foundation 310 East 46th Street New York, New York 10017 <i>Africa Leadership Forum</i>	180,000		180,000	
African Academy of Sciences P.O. Box 14798 Nairobi, Kenya <i>Publications, networking of African scientific organizations, and general support</i>	300,000		300,000	
African-American Institute 833 United Nations Plaza New York, New York 10017 <i>Program on policy issues in African-American relations</i>	250,000		250,000	
<i>Research and writing by Achola Palo Okeyo on technology generation and use</i>	122,500		80,500	42,000
African Council on Communication Education P.O. Box 47495 Nairobi, Kenya <i>Biennial conference</i>	25,000			25,000

Recipient and/or purpose	Allocated or appropriated during year	Unpaid at beginning of year	Paid during year	Unpaid at end of year
<i>Workshop on institutional capacity-building</i>	25,000		25,000	
African Medical and Research Foundation P.O. Box 30125, Wilson Airport Nairobi, Kenya <i>African regional conference on social science and medicine</i>	50,000		50,000	
Africare 440 R Street, N.W. Washington, D.C. 20001 <i>Maternal health and child survival program in Imo State, Nigeria</i>	15,000		15,000	
Ahmadu Bello University Zaria, Nigeria <i>Research on maternal mortality in the Zaria local government area</i>	160,000			160,000
Alaska, State of, Department of Education Juneau, Alaska 99811 <i>Implementation of state policy reforms in middle grade education</i>	60,000		60,000	
American Academy of Pediatrics 141 Northwest Point Boulevard Elk Grove Village, Illinois 60009 <i>Conference on cross-national comparisons of child health</i>	20,000		20,000	
American Association for Higher Education One Dupont Circle Washington, D.C. 20036 <i>Project to facilitate college and university presidents' leadership in strengthening the profession of teaching — \$545,000 (1988)</i>		204,994	204,994	
American Association for the Advancement of Science 1333 H Street, N.W. Washington, D.C. 20005 <i>National Forum for School Science — \$194,000 (1988)</i>		34,520	34,520	
<i>Program to strengthen the scientific and the technological infrastructure in sub-Saharan Africa — \$699,700 (1988)</i>	650,000	196,290	196,290 250,000	400,000
<i>Program on Science, Arms Control, and National Security — \$350,000 (1989)</i>		350,000	175,000	175,000
<i>Congressional staff retreat on issues in science education</i>	25,000		25,000	

Recipient and/or purpose	Allocated or appropriated during year	Unpaid at beginning of year	Paid during year	Unpaid at end of year
<i>Project to improve science and mathematics education for minority, female, and disabled youth</i>	850,000		421,000	429,000
American Association of University Women Educational Foundation 2401 Virginia Avenue, N.W. Washington, D.C. 20037 <i>Planning a teacher institute on classroom equity issues, especially in the teaching of mathematics and science</i>	25,000		25,000	
American Civil Liberties Union Foundation 132 West 43rd Street New York, New York 10036 <i>Voting Rights Project — \$200,000 (1988)</i>	300,000	50,000	50,000 100,000	200,000
<i>Center for National Security Studies Project on Government Secrecy — \$200,000 (1989)</i>		100,000	100,000	
American College of Nurse-Midwives 1522 K Street, N.W. Washington, D.C. 20005 <i>Continuing education courses for nurse-midwives in Ghana</i>	250,000		125,000	125,000
American Committee on U.S.-Soviet Relations 109 Eleventh Street, S.E. Washington, D.C. 20003 <i>Assessment of developments in the Soviet Union and in the U.S.-Soviet relationship</i>	300,000		75,000	225,000
American Council of Learned Societies 228 East 45th Street New York, New York 10017 <i>Fellowships for recent Ph.D. recipients — \$345,000 (1987)</i>		115,000	115,000	
American Library Association 50 East Huron Street Chicago, Illinois 60611 <i>Program to encourage educational videocassette use in public libraries — \$524,000 (1989)</i>		349,000	349,000	
American Red Cross 17th and D Streets, N.W. Washington, D.C. 20006 <i>Technical assistance for Red Cross societies in sub-Saharan Africa and the Caribbean — \$400,000 (1989)</i>		192,500	115,000	77,500
<i>Project to improve blood transfusion services in Uganda</i>	25,000			25,000

Recipient and/or purpose	Allocated or appropriated during year	Unpaid at beginning of year	Paid during year	Unpaid at end of year
American Society of Zoologists 104 Sirius Circle Thousand Oaks, California 91360 <i>Symposium series on education in biology — \$162,330 (1988)</i>		57,000		57,000
<i>Reprinting symposium papers on undergraduate biology</i>	69,500		69,500	
Arizona State University Tempe, Arizona 85287 <i>Interinstitutional program to increase the numbers of Hispanic students in graduate schools</i>	382,000		176,000	206,000
Arkansas Department of Education 4 State Capitol Mall, Arch-Ford Education Building Little Rock, Arkansas 72201 <i>Implementation of state policy reforms in middle grade education</i>	60,000		60,000	
Arms Control Association 11 Dupont Circle, N.W. Washington, D.C. 20036 <i>Program on arms control and national security for the Washington press corps</i>	200,000		100,000	100,000
Aspen Institute for Humanistic Studies P.O. Box 222 Queenstown, Maryland 21658 <i>Aspen Strategy Group — \$200,000 (1988)</i>	225,000	50,000	50,000 56,250	168,750
<i>Meetings on U.S. relations with southern Africa for American lawmakers</i>	330,000		330,000	
<i>Meetings on U.S.-Soviet relations for American lawmakers</i>	380,800		380,800	
Association of Colleges and Universities of the State of New York 100 State Street Albany, New York 12207 <i>Planning a project to increase the number of minority faculty in institutions of higher education in New York</i>	15,000		15,000	
Association of Commonwealth Universities 36 Gordon Square London WC1H 0PF, England <i>Fellowships for distinguished academics at Commonwealth universities</i>	150,000			150,000

Recipient and/or purpose	Allocated or appropriated during year	Unpaid at beginning of year	Paid during year	Unpaid at end of year
<p>Association of Science-Technology Centers 1413 K Street, N.W. Washington, D.C. 20005</p> <p><i>Assistance to science museums in serving girls, minorities and disabled students — \$433,700 (1987)</i></p> <p><i>Project to strengthen the capacity of science museums to support school science programs</i></p>	25,000	71,200	71,200	
<p>Association of State Supervisors of Mathematics P. O. Box 7841 Madison, Wisconsin 53707</p> <p><i>Planning the implementation of reforms in school mathematics curricula — \$100,000 (1989)</i></p>		50,000	25,000	25,000
<p>Atlantic Council of the United States 1616 H Street, N.W. Washington, D.C. 20006</p> <p><i>U.S.-Soviet project on the future of U.S.-Soviet relations in a pluralistic world</i></p>	87,000		43,500	43,500
<p>Avance-San Antonio 301 South Frio San Antonio, Texas 78207</p> <p><i>Evaluation of the Parent Education Program — \$342,000 (1989)</i></p>	142,000	94,000	94,000 71,000	71,000
<p>Bard College Annandale-on-Hudson, New York 12504</p> <p><i>Conference on nationalism and Eastern Europe</i></p>	25,000		25,000	
<p>Black Lawyers' Association Legal Education Centre P. O. Box 5217 2000 Johannesburg, Republic of South Africa</p> <p><i>Publications and educational programs for black lawyers in South Africa — \$75,000 (1989)</i></p>		50,000	25,000	25,000
<p>Boston College Chestnut Hill, Massachusetts 02167</p> <p><i>Study of the feasibility of independent monitoring of educational, occupational, and professional tests — \$197,500 (1989)</i></p>		98,750	98,750	
<p>Boy Scouts of America, National Council Northeast Region, P. O. Box 350 Dayton, New Jersey 08810</p> <p><i>Support of an urban scouting program of the Greater New York Councils</i></p>	25,000		25,000	

Recipient and/or purpose	Allocated or appropriated during year	Unpaid at beginning of year	Paid during year	Unpaid at end of year
Breznitz, Shlomo 343 Congressional Lane Rockville, Maryland 20852 <i>Writing on education for a changing world — \$25,000 (1985)</i>		500		500
Bristol, University of Bristol BS8 1TH, England <i>Study by Maureen Samms-Vaughan of determinants of low-birthweight and growth retardation in Jamaica</i>	80,000		40,000	40,000
Broader Perspectives, Incorporated P. O. Box 272851 Houston, Texas 77277 <i>Review of science textbooks proposed for use in public schools in Texas</i>	25,000		25,000	
Brookings Institution 1775 Massachusetts Avenue, N.W. Washington, D.C. 20036 <i>Research on international security issues as affected by U.S.-Soviet relations — \$900,000 (1988)</i>		300,000	300,000	
<i>Research and writing on international relations by Harold Saunders — \$24,000 (1989)</i>	25,000	24,000	24,000	25,000
<i>Consultation of U.S. archives on Uganda in Washington, D.C., by Godfrey Okoth</i>	5,750		5,750	
<i>Research on conflict resolution in Africa</i>	450,000		225,000	225,000
<i>Visits of Soviet international security scholars</i>	11,000		11,000	
Brown University Providence, Rhode Island 02912 <i>Coalition of Essential Schools — \$400,000 (1988)</i>		100,000	100,000	
California Department of Education 721 Capitol Mall Sacramento, California 94244 <i>Implementation of state policy reforms in middle grade education</i>	60,000		60,000	
<i>Regional networks of middle grade schools to introduce educational reform</i>	425,000		191,000	234,000
California State University, Dominguez Hills Carson, California 90747 <i>Model program to increase the numbers of minority teachers</i>	200,000		98,500	101,500

Recipient and /or purpose	Allocated or appropriated during year	Unpaid at beginning of year	Paid during year	Unpaid at end of year
California, University of, Berkeley Berkeley, California 94720 <i>Berkeley-Stanford Program on Soviet International Behavior — \$750,000 (1988)</i>		403,821	260,378	143,443
<i>Mathematics, engineering, and science achievement program at the junior high school level — \$350,000 (1988)</i>		87,500	87,500	
<i>Study of differences in school performance, educational strategies, and cultural models among minority groups — \$100,000 (1989)</i>		50,000	50,000	
California, University of, Davis Davis, California 95616 <i>Research conference on military intervention to impose political order</i>	25,000		25,000	
California, University of, Irvine Irvine, California 92717 <i>Model program to enhance minority participation in science and technology</i>	372,200		128,400	243,800
California, University of, San Diego La Jolla, California 92093 <i>Conference on security in the Pacific region</i>	25,000		25,000	
<i>Support by the Carnegie Commission on Science, Technology, and Government of a meeting on government science policy</i>	18,000		18,000	
<i>U.S.-Soviet project on the educational uses of computers in the early elementary grades</i>	400,000		400,000	
California, University of, San Francisco San Francisco, California 94143 <i>Evaluation of comprehensive school-based health centers in California — \$250,000 (1989)</i>		208,500	84,500	124,000
Cape Town, University of University Private Bag 7700 Rondebosch, Republic of South Africa <i>Centre for Documentary Photography — \$72,000 (1987)</i>	62,000	16,000	16,000 62,000	
Carnegie Dunfermline Trust Abbey Park House, Dunfermline Fife KY12 7PB, United Kingdom <i>Maintenance of the Andrew Carnegie Birthplace Memorial — \$25,000 (1987)</i>		10,000	5,000	5,000

Recipient and/or purpose	Allocated or appropriated during year	Unpaid at beginning of year	Paid during year	Unpaid at end of year
Carnegie Endowment for International Peace 2400 N Street, N.W. Washington, D.C. 20037 <i>Preparation, publication, and dissemination of annual reports on nuclear proliferation — \$230,000 (1988)</i>	300,000	57,500	57,500 75,000	225,000
Carnegie Institution of Washington 1530 P Street, N.W. Washington, D.C. 20005 <i>Saturday science program for disadvantaged elementary school students in Washington, D.C.</i>	90,000		60,000	30,000
Carnegie Mellon University 5000 Forbes Avenue Pittsburgh, Pennsylvania 15213 <i>Model support program for women and underrepresented minorities in science and engineering</i>	25,000		12,500	12,500
<i>Study of adolescent decision making</i>	150,000		150,000	
<i>Study of chemical arms control and verification</i>	345,000		84,000	261,000
Center for Applied Linguistics 1118 22nd Street, N.W. Washington, D.C. 20037 <i>National project to improve mathematics and science education through language instruction — \$290,000 (1988)</i>		63,000	63,000	
<i>Dissemination of a national project to improve math and science education in middle schools through language instruction</i>	25,000		25,000	
Center for Education on Nuclear War 122 Maryland Avenue, N.E. Washington, D.C. 20002 <i>Study group on U.S. policy on the use of nuclear weapons</i>	25,000		25,000	
Center for Foreign Journalists 11690-A Sunrise Valley Drive Reston, Virginia 22091 <i>East-West media conference on issues of the 1990s</i>	25,000		25,000	
Center for Foreign Policy Development Brown University Providence, Rhode Island 02912 <i>Planning a joint U.S.-Soviet project to develop a video conferencing facility for academic exchanges</i>	25,000			25,000
<i>Project on U.S.-Soviet-Cuban relations</i>	25,000		25,000	

Recipient and/or purpose	Allocated or appropriated during year	Unpaid at beginning of year	Paid during year	Unpaid at end of year
Center for National Independence in Politics 2030 East Broadway Tucson, Arizona 85719 <i>Support</i>	25,000		25,000	
Centre for Our Common Future Palais Wilson 52, rue des Paquis 1201 Geneva, Switzerland <i>Follow-up in Africa and the United States of the World Commission on Environment and Development — \$240,000 (1989)</i>		98,000	98,000	
Center for Policy Alternatives 2000 Florida Avenue, N.W. Washington, D.C. 20009 <i>Project on state election law reform to increase voter participation</i>	250,000		125,000	125,000
Center for Population Options 1025 Vermont Avenue, N.W. Washington, D.C. 20005 <i>Projects concerned with the electronic media and adolescent sexuality — \$150,000 (1989)</i>		75,000	75,000	
<i>Services to school-based health clinics</i>	200,000		100,000	100,000
Center for Strategic and International Studies 1800 K Street, N.W. Washington, D.C. 20006 <i>Extension of U.S.-Soviet military-to-military dialogue</i>	25,000		25,000	
Center for Women Policy Studies 2000 P Street, N.W. Washington, D.C. 20036 <i>Program to increase minority girls' participation in mathematics, science, and technology education — \$200,000 (1989)</i>		100,000	100,000	
Chicago Education Federation 10 West 35th Street Chicago, Illinois 60616 <i>Support of the Academy for Mathematics and Science Teachers in Chicago</i>	23,400		23,400	
Chicago, University of Chicago, Illinois 60637 <i>Integrated secondary school mathematics curriculum</i>	93,750		60,000	33,750
<i>Planning meeting for a study of the program of the Center for Successful Child Development for early intervention and child development in an inner-city context</i>	21,000		21,000	

Recipient and /or purpose	Allocated or appropriated during year	Unpaid at beginning of year	Paid during year	Unpaid at end of year
<i>Research and policy analysis on child and adolescent violence</i>	212,000		106,000	106,000
<i>Study of the effects of the planned unification of the European Community on interaction between universities, industries, and national laboratories</i>	25,000		25,000	
Child Care Employee Project P.O. Box 5603 Berkeley, California 94705 <i>Dissemination of the National Child Care Staffing Study</i>	56,000		56,000	
Children of Alcoholics Foundation 200 Park Avenue New York, New York 10166 <i>Conference on protecting vulnerable children</i>	85,800		65,500	20,300
Children's Defense Fund 122 C Street, N.W. Washington, D.C. 20001 <i>General support and a fund for institutional development — \$1,250,000 (1988)</i>		200,000	200,000	
<i>Final grant toward a media campaign to help prevent adolescent pregnancy — \$200,000 (1989)</i>		150,000	100,000	50,000
Children's Express Foundation 245 Seventh Avenue New York, New York 10001 <i>Creation of a national system of children's press clubs in conjunction with a weekly televised children's news program — \$225,000 (1988)</i>		50,000	50,000	
Claremont Graduate School Claremont, California 91711 <i>Study of labor relations reforms in public education</i>	99,100		50,000	49,100
Clark Atlanta University Atlanta, Georgia 30314 <i>Planning a program of technical assistance to black elected officials in Georgia</i>	25,000		25,000	
Cleveland Education Fund 1456 Hanna Building Cleveland, Ohio 44115 <i>New science curriculum in the Cleveland public schools</i>	150,000		58,000	92,000
Colorado Department of Education 201 East Colfax Denver, Colorado 80203 <i>Implementation of state policy reforms in middle grade education</i>	60,000		60,000	

Recipient and /or purpose	Allocated or appropriated during year	Unpaid at beginning of year	Paid during year	Unpaid at end of year
Columbia University New York, New York 10027				
<i>Research and training on maternal health in sub-Saharan Africa — \$996,900 (1987)</i>	998,000	51,175	51,175 500,000	498,000
<i>Development of model comprehensive health and educational services in junior high schools — \$440,000 (1988)</i>		97,780	97,780	
<i>National Resource Center for Children in Poverty — \$1,000,000 (1989)</i>		500,000	500,000	
<i>Establishment of an advisory committee on East European economic reform</i>	25,000		25,000	
<i>Faculty seminar on the political psychology of Soviet-American relations</i>	12,375		12,375	
<i>Position of an archivist for material relating to Andrew Carnegie's philanthropies</i>	365,000		365,000	
<i>Support of Anatoly Kandel and Vladimir Shamberg at the W. Averell Harriman Institute for Advanced Study of the Soviet Union</i>	16,800		16,800	
<i>Visits of Soviet international security scholars</i>	9,970		9,970	
Teachers College, Columbia University New York, New York 10027				
<i>Research on the history of American education — \$197,736 (1973)</i>		76,736		76,736
<i>Publications resulting from a conference on education and the economy</i>	68,000		68,000	
<i>Workshops on educational issues of national concern</i>	75,000		75,000	
Committee for Economic Development 477 Madison Avenue New York, New York 10022				
<i>Program in education and child development — \$300,000 (1989)</i>		250,000	100,000	150,000
Commonwealth Caribbean Medical Research Council 24 Stephenson Way London NW1 2BQ, England				
<i>Development planning</i>	77,000		77,000	
Congress of National Black Churches 600 New Hampshire Avenue, N.W. Washington, D.C. 20037				
<i>Church-based educational programs for children and families — \$750,000 (1989)</i>		575,000	300,000	275,000

Recipient and/or purpose	Allocated or appropriated during year	Unpaid at beginning of year	Paid during year	Unpaid at end of year
Congressional Institute for the Future 218 D Street, S.E. Washington, D.C. 20510 <i>Dissemination of reports of the Office of Technology Assessment — \$150,000 (1989)</i>		90,000	60,000	30,000
Connecticut Department of Education 165 Capitol Avenue Hartford, Connecticut 06106 <i>Implementation of state policy reforms in middle grade education</i>	60,000		60,000	
Council for Aid to Education 51 Madison Avenue New York, New York 10010 <i>Support</i>	25,000		25,000	
Council for Court Excellence 1025 Vermont Avenue, N.W. Washington, D.C. 20005 <i>Dissemination and implementation of the recommendations of the Federal Courts Study Committee</i>	25,000			25,000
Council for Excellence in Government 1775 Pennsylvania Avenue, N.W. Washington, D.C. 20006 <i>Book on the most important scientific and technical jobs in the U.S. government</i>	75,000		50,000	25,000
<i>Support</i>	25,000		25,000	
Council of Chief State School Officers 400 North Capitol Street, N.W. Washington, D.C. 20001 <i>Support of the Interstate New Teacher Assessment and Support Consortium</i>	85,600		85,600	
Council of Graduate Schools in the United States One Dupont Circle, N.W. Washington, D.C. 20036 <i>Study of the underrepresentation of minorities in graduate schools</i>	25,000			25,000
Council of State Governments P.O. Box 11910, Iron Works Pike Lexington, Kentucky 40578 <i>Adolescent pregnancy prevention activities of the Southern Governors' Association — \$106,000 (1989)</i>		53,000	53,000	
<i>Center on adolescent pregnancy prevention for the southern region</i>	329,000		82,250	246,750
Council on Foreign Relations 58 East 68th Street New York, New York 10021 <i>Study of U.S.-Soviet relations in the next decade — \$208,000 (1989)</i>		138,500	69,500	69,000

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Council on Foundations 1828 L Street, N.W. Washington, D.C. 20036				
1990 membership support	24,700		24,700	
Project on pluralism in philanthropy	50,000		50,000	
Dalhousie University Halifax, Nova Scotia B3H 3H5, Canada				
Teaching, research, and writing on capacity-building and human resource development in Africa by Alexander A. Kwapong	50,000		50,000	
Dar es Salaam, University of Dar es Salaam, Tanzania				
Evaluation of the Essential Drug Program in Tanzania — \$150,000 (1988)		68,032	68,032	
Eastern and Southern Africa Technology Policy Research Network at the Institute of Development Studies — \$171,200 (1989)		114,100	57,100	57,000
Delaware State Department of Public Instruction Federal and Lockerman Streets Dover, Delaware 19903				
Implementation of state policy reforms in middle grade education	60,000		60,000	
Development Group for Alternative Policies 1401 Eye Street, N.W. Washington, D.C. 20005				
Support	105,000		105,000	
Symposium on U.S. development assistance policy in the eastern Caribbean	25,000		25,000	
Dryfoos, Joy G. 20 Circle Drive Hastings-on-Hudson, New York 10706				
Research and writing on adolescents at risk	100,000		65,000	35,000
Duke University Durham, North Carolina 27706				
Research and publication on Soviet domestic politics — \$606,000 (1989)		505,000	202,000	303,000
Collaborative program to improve maternal and child health in Tanzania	250,000		184,000	66,000
South African Documentary Photography Fellowship Program at the Center for Documentary Studies	53,000		26,500	26,500

Recipient and/or purpose	Allocated or appropriated during year	Unpaid at beginning of year	Paid during year	Unpaid at end of year
Editorial Projects in Education 4301 Connecticut Avenue, N.W. Washington, D.C. 20008 Teacher Magazine	500,000		500,000	
Education Commission of the States 707 17th Street Denver, Colorado 80202 <i>National program to foster mentoring relationships between college students and youth at risk of school failure — \$374,000 (1989)</i>		276,500	187,000	89,500
<i>Project to assist states with policy and administrative issues in educational reform</i>	400,000		200,000	200,000
Education Development Center 55 Chapel Street Newton, Massachusetts 02160 <i>Review of violence prevention programs</i>	64,000		64,000	
<i>Study of staff development policy in public education</i>	25,000		25,000	
Education, Training, and Research Associates 1700 Mission Street Santa Cruz, California 95061 <i>Development of family life education materials for Hispanic students — \$173,900 (1987)</i>		17,224	17,224	
Educational Broadcasting Corporation 356 West 58th Street New York, New York 10019 <i>Television interview with Nelson Mandela</i>	5,000		5,000	
Educational Foundation for Nuclear Science 6042 South Kimbark Avenue Chicago, Illinois 60637 <i>Implementation of a marketing strategy for the Bulletin of the Atomic Scientists — \$200,000 (1989)</i>		150,000	100,000	50,000
Educational Testing Service Princeton, New Jersey 08541 <i>Second International Assessment of Educational Progress</i>	25,000		25,000	
Eisenhower World Affairs Institute, Dwight D. 918 16th Street, N.W. Washington, D.C. 20006 <i>U.S.-Soviet exchange on earthquake management</i>	25,000		25,000	

Recipient and/or purpose	Allocated or appropriated during year	Unpaid at beginning of year	Paid during year	Unpaid at end of year
Emory University Atlanta, Georgia 30322 <i>International negotiation network at the Carter Center</i>	250,000		125,000	125,000
<i>Planning a worldwide program at the Carter Center to reduce the use of tobacco by women and children</i>	25,000		25,000	
Environmental Defense Fund 257 Park Avenue South New York, New York 10010 <i>Research on the effects of environmentally introduced toxins on pregnant adolescents</i>	240,000			240,000
Erikson Institute 25 West Chicago Avenue Chicago, Illinois 60610 <i>Training, certification, and assistance program for community child safety specialists — \$377,000 (1989)</i>		283,000	188,500	94,500
Families and Work Institute 330 Seventh Avenue New York, New York 10001 <i>Feasibility study of public-private partnerships to improve child care services in New York State</i>	10,000		10,000	
Family Care International 588 Broadway New York, New York 10012 <i>Consultations with women's organizations and organization of the Safe Motherhood Conference in Abuja, Nigeria, in 1990</i>	201,000		201,000	
Federation of American Scientists Fund 307 Massachusetts Avenue, N.E. Washington, D.C. 20002 <i>U.S.-Soviet joint scientific study of disarmament verification</i>	100,000		100,000	
First Nations Financial Project 69 Kelley Road Falmouth, Virginia 22405 <i>Support of a leadership and management fellowship program for American Indians</i>	25,000		25,000	
Fisher, Francis Dummer 16-A Fayerweather Street Cambridge, Massachusetts 02138 <i>Analysis of the educational uses of an information infrastructure combining computers and television</i>	23,000		23,000	

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Florida Department of Education 400 South Monroe Street Tallahassee, Florida 32399 <i>Implementation of state policy reforms in middle grade education</i>	60,000		60,000	
Florida State University Tallahassee, Florida 32306 <i>Public policy project to promote the well-being of children</i>	255,000		185,000	70,000
Foundation Center 79 Fifth Avenue New York, New York 10003 <i>Support — \$100,000 (1989)</i>		50,000	50,000	
Foundation for Advancements in Science and Education 4801 Wilshire Boulevard Los Angeles, California 90010 <i>Production of a television series for adolescents on mathematics and its relationship to the workplace</i>	250,000		250,000	
Foundation Project Station 3239 Half Moon Bay, California 94019 <i>Support</i>	20,000			20,000
Fund for New York City Public Education 96 Morton Street New York, New York 10014 <i>Support</i>	100,000		100,000	
Fund for Peace 345 East 46th Street New York, New York 10017 <i>National Security Archive</i>	300,000		300,000	
George Mason University Fairfax, Virginia 22030 <i>Workshop on the future of Northern Ireland in post-1992 Europe</i>	6,500		6,500	
George Washington University Washington, D.C. 20052 <i>Series of policy seminars on child health and development issues — \$200,000 (1989)</i>		100,000	100,000	
<i>Research and writing on applied political psychology by Jerrold M. Post</i>	334,790		55,800	278,990
<i>Study on the technology of arms control and nonproliferation by Peter D. Zimmerman</i>	25,000		25,000	
<i>Summer science policy intern at the White House Office of Science and Technology Policy</i>	5,000		5,000	

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Georgia Department of Education 205 Butler Street, S.E. Atlanta, Georgia 30334 <i>Implementation of state policy reforms in middle grade education</i>	60,000		60,000	
Ghana, University of Legon, Accra, Ghana <i>Project for postgraduate training in obstetrics and gynecology in Ghana — \$482,200 (1989)</i>		314,800	157,400	157,400
Girls Incorporated 30 East 33rd Street New York, New York 10016 <i>Development and evaluation of four models of pregnancy prevention among adolescents — \$200,000 (1988)</i>	150,000	25,000	25,000 75,000	75,000
<i>Staff training and a guide to staff development for a science mathematics program for young adolescent girls in low-income communities — \$150,000 (1989)</i>		70,000	70,000	
Gliksman, Alex 3800 North Fairfax Drive Arlington, Virginia 22203 <i>Research and writing on emerging conventional arms technology — \$25,000 (1988)</i>		2,150		2,150
Global Outlook Education Institute 405 Lytton Avenue Palo Alto, California 94301 <i>Planning a project on strengthening legislative oversight of defense and security policy in the Soviet Union</i>	11,000		11,000	
Hall of Science of the City of New York 47-01 111th Street Corona, New York 11368 <i>Program to increase the number of minority and female science teachers — \$192,000 (1989)</i>		115,000	115,000	
Harvard University Cambridge, Massachusetts 02138 <i>Study of federal research and development policies and their impact on science and engineering education — \$250,000 (1988)</i>		83,334	83,334	
<i>Takemi Program in International Health of the Harvard School of Public Health — \$250,000 (1988)</i>		185,000	94,000	91,000
<i>Analysis of policies affecting children in poverty — \$321,000 (1989)</i>		175,000	175,000	

Recipient and/or purpose	Allocated or appropriated during year	Unpaid at beginning of year	Paid during year	Unpaid at end of year
<i>Childhood Injury Prevention Resource Center — \$425,000 (1989)</i>		217,000	217,000	
<i>Research and training at the Harvard Negotiation Project on improving the U.S.-Soviet negotiation process — \$294,000 (1989)</i>		147,000	147,000	
<i>U.S.-Soviet study of confidence and security-building measures in Europe — \$227,000 (1989)</i>		95,000		95,000
<i>Collaborative training program with African institutions in health and behavioral research</i>	490,000		243,000	247,000
<i>Dissemination of the findings of the Commission on Health Research for Development</i>	100,000		100,000	
<i>Joint U.S.-Soviet workshop on diplomatic negotiation</i>	25,000		25,000	
<i>Planning a U.S.-Soviet joint study of criminal justice systems</i>	19,500		19,500	
<i>Project in the Soviet Union on negotiation and dispute resolution</i>	213,500		106,750	106,750
<i>Research and education on the avoidance of nuclear war</i>	600,000		300,000	300,000
<i>Research and technical assistance by the Project on Avoiding Nuclear War on strengthening democratic institutions in Eastern Europe and the Soviet Union</i>	735,000		367,500	367,500
<i>Research and writing on treaty compliance, interpretation, and adaptation</i>	25,000		25,000	
<i>Research, writing, and consulting on U.S.-Soviet military relations by Kurt M. Campbell</i>	88,500		88,500	
<i>Support of a Soviet diplomat at the Center for International Affairs</i>	25,000		25,000	
Helsinki Watch 36 West 44th Street New York, New York 10036 <i>Expansion of activities with the Soviet Union — \$100,000 (1989)</i>		50,000	50,000	
Hesperian Foundation P.O. Box 1692 Palo Alto, California 94302 <i>Manual on midwifery for village health workers</i>	25,000		25,000	
Hudson Institute 5395 Emerson Way Indianapolis, Indiana 46226 <i>Project on the technological transformation of teaching and learning</i>	25,000		25,000	

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Human SERVE Fund 622 West 113th Street New York, New York 10025 <i>Support</i>	25,000		25,000	
Ibadan, University of Ibadan, Nigeria <i>Analysis of demand and delivery of health care in Nigeria — \$146,000 (1988)</i>		19,300	19,300	
Illinois Institute of Technology Chicago, Illinois 60616 <i>Preparation and dissemination of a summary of the conference, "Science, Technology, and the Allocation of Global Resources"</i>	11,000		11,000	
Illinois State Board of Education 100 North First Street Springfield, Illinois 62777 <i>Implementation of state policy reforms in middle grade education</i>	60,000		60,000	
Ilorin, University of Ilorin, Nigeria <i>Research on maternal mortality in a rural Nigerian community</i>	150,000			150,000
Independent Sector 1828 L Street, N.W. Washington, D.C. 20036 <i>1990 membership support</i>	7,400		7,400	
<i>Studies in leadership by John W. Gardner</i>	25,000			25,000
Indiana Department of Education State House Indianapolis, Indiana 46204 <i>Implementation of state policy reforms in middle grade education</i>	60,000		60,000	
Institute for Advanced Study Princeton, New Jersey 08540 <i>Program of visiting Soviet scholars</i>	58,000		58,000	
Institute for East-West Security Studies 360 Lexington Avenue New York, New York 10017 <i>U.S.-Soviet Relations Program — \$300,000 (1985)</i>		19,500	17,273	2,227
<i>Working group on conventional arms control — \$247,000 (1988)</i>		63,000	63,000	
<i>Program on the future role of military power in Europe</i>	315,800		76,300	239,500
Institute for Educational Leadership 1001 Connecticut Avenue, N.W. Washington, D.C. 20036 <i>Center for Demographic Policy</i>	73,200		73,200	

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Institute for Research on Learning 2550 Hanover Street Palo Alto, California 94304 <i>Establishment of a consortium for research on the teaching and learning of science and mathematics — \$400,000 (1989)</i>		200,000	200,000	
Institute of International Education 809 United Nations Plaza New York, New York 10017 <i>Networking activities of the International Health Policy Program — \$100,000 (1989)</i>	148,500	50,000	50,000 148,500	
<i>Career development program for black South Africans at U.S. universities</i>	100,000		100,000	
<i>Consultation on southern African affairs by J. Wayne Fredericks</i>	125,000		125,000	
<i>Information exchange on U.S. educational opportunities for black South Africans</i>	50,000		50,000	
Inter-American Dialogue 1333 New Hampshire Avenue, N.W. Washington, D.C. 20036 <i>Support — \$200,000 (1989)</i>		133,000	67,000	66,000
Intercultural Development Research Association 5835 Callaghan Road San Antonio, Texas 78228 <i>Development of a plan for an equitable system of school finance in Texas</i>	50,000		50,000	
International Council of Nurses 3, place Jean-Marteau 1201 Geneva, Switzerland <i>Participation by representatives of Commonwealth countries in Africa in workshops on nursing regulation for primary health care — \$200,000 (1988)</i>		50,000	50,000	
International Epidemiological Association United Medical and Dental Schools London SE1 7EH, England <i>Participation of African epidemiologists in its twelfth scientific meeting</i>	24,500		24,500	
International Foundation for the Survival and Development of Humanity 11 Dupont Circle Washington, D.C. 20036 <i>Support — \$500,000 (1989)</i>		500,000	250,000	250,000

Recipient and/or purpose	Allocated or appropriated during year	Unpaid at beginning of year	Paid during year	Unpaid at end of year
International Peace Academy 777 United Nations Plaza New York, New York 10017 <i>Discussions among United States, Soviet, and Third World representatives on regional security — \$150,000 (1989)</i>		125,000	87,500	37,500
International Research and Exchanges Board 126 Alexander Street Princeton, New Jersey 08540 <i>Facilitation and dissemination of meetings involving U.S. and Soviet scholars and policy experts — \$500,000 (1988)</i>		250,000	250,000	
<i>Meetings and exchanges involving U.S. and Soviet scholars and policy experts</i>	750,000		375,000	375,000
<i>Program of exchange of scholars between U.S. and Soviet security studies centers</i>	250,000			250,000
Internews Network P. O. Box 4448 Arcata, California 95521 <i>Meeting of national foreign policy planners on the future of Europe</i>	24,080		24,080	
Interparliamentary Conference on the Global Environment 440B Hart Senate Office Building Washington, D.C. 20510 <i>Participation by African parliamentarians</i>	25,000		25,000	
Iowa Committee of Correspondence 4942 Greene Avenue Omaha, Nebraska 68157 <i>Symposium on understanding science and its human impact and follow-up activities</i>	12,000		12,000	
Jobs for America's Graduates 1250 Eye Street, N.W. Washington, D.C. 20005 <i>National school-to-work transition program for at-risk youth — \$300,000 (1989)</i>		200,000	100,000	100,000
Johns Hopkins University Baltimore, Maryland 21218 <i>Development of a handbook for state and local policymakers on the prevention of childhood injury — \$300,000 (1987)</i>		50,000	50,000	
<i>Fellowship program to increase international cooperation on health issues — \$250,000 (1989)</i>		125,000	125,000	
<i>Meeting on U.S.-Japan relations</i>	25,000		25,000	

Recipient and/or purpose	Allocated or appropriated during year	Unpaid at beginning of year	Paid during year	Unpaid at end of year
<i>Policy research and dissemination on the future of the Atlantic Alliance</i>	150,000		150,000	
<i>U.S.-Soviet research project on conflict resolution in Third World regional conflicts</i>	150,000		150,000	
Joint Center for Political and Economic Studies 1301 Pennsylvania Avenue, N.W. Washington, D.C. 20004				
<i>Planning a project on black male youth</i>	25,000		25,000	
Kaiser Family Foundation, Henry J. 2400 Sandy Hill Menlo Park, California 94025				
<i>Magazine on health and development in southern Africa</i>	13,000			13,000
Keller, George 2432 Pickwick Road Baltimore, Maryland 21207				
<i>Research and writing on changes in higher education required by new conditions in American society — \$25,000 (1988)</i>		8,125		8,125
Kentucky Department of Education Capital Plaza Tower Frankfort, Kentucky 40601				
<i>Implementation of state policy reforms in middle grade education</i>	60,000		60,000	
Lagos, University of Lagos, Nigeria				
<i>Planning maternal health research in a rural Nigerian community by the University of Lagos Teaching Hospital — \$23,500 (1989)</i>		23,500	23,500 ^a	
<i>Planning maternal health research</i>	25,000		25,000	
Lawyers' Committee for Civil Rights Under Law 1400 Eye Street, N.W. Washington, D.C. 20005				
<i>Support of the Voting Rights Project</i>	350,000		250,000	100,000
Lawyers' Committee for Human Rights 330 7th Avenue New York, New York 10001				
<i>Monitoring and analysis of Soviet legal reform — \$250,000 (1989)</i>		187,500	125,000	62,500
Los Angeles Educational Partnership 315 West Ninth Street Los Angeles, California 90015				
<i>Model program to improve science education in the Los Angeles public schools</i>	150,000		84,900	65,100

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Louisiana State Department of Education 626 North Fourth Street Baton Rouge, Louisiana 70804 <i>Implementation of state policy reforms in middle grade education</i>	60,000		60,000	
Makerere University P. O. Box 7062 Kampala, Uganda <i>Research on U.S. foreign policy toward Uganda</i>	22,000		22,000	
Malawi, University of Zomba, Malawi <i>Project on maternal and child nutrition in Malawi conducted by the Centre for Social Research — \$253,500 (1989)</i>		102,500	73,500	29,000
Marine Biological Laboratory Woods Hole, Massachusetts 02543 <i>Fellowship program for science writers and broadcasters</i>	25,000		25,000	
Maryland Foundation, University of Adelphi, Maryland 20783 <i>Visits by two Soviet scholars at the Center for International Security Studies</i>	20,050		20,050	
Maryland State Department of Education 200 West Baltimore Street Baltimore, Maryland 21201 <i>Implementation of state policy reforms in middle grade education</i>	60,000		60,000	
Massachusetts Department of Education 1385 Hancock Street Quincy, Massachusetts 02169 <i>Implementation of state policy reforms in middle grade education</i>	60,000		60,000	
Massachusetts Institute of Technology Cambridge, Massachusetts 02139 <i>Defense and Arms Control Studies Program — \$1,100,000 (1988)</i>		875,000	350,000	525,000
<i>National program to increase the education of minorities — \$790,600 (1989)</i>		395,300	395,300	
<i>Book on the relationship between science, technology, and international affairs</i>	25,000		25,000	
<i>Dissemination of a comprehensive plan to improve the education of minorities</i>	25,000		25,000	
	255,600		255,600	
<i>Summer program in science and engineering for high school teachers and a new science teachers association</i>	25,000		25,000	

Recipient and/or purpose	Allocated or appropriated during year	Unpaid at beginning of year	Paid during year	Unpaid at end of year
Mathematical Association of America 1529 18th Street, N.W. Washington, D.C. 20036 <i>Planning a project to strengthen minority achievement in mathematics</i>	25,000		25,000	
McKenzie Group Columbia Square, 555 13th Street, N.W. Washington, D.C. 20004 <i>Compiling and disseminating court rulings regarding desegregation plans</i>	25,000			25,000
Meharry Medical College 1005 D. B. Todd Boulevard Nashville, Tennessee 37208 <i>Support of a community-based pregnancy prevention program for adolescents</i>	500,000		157,500	342,500
MELD 123 North 3rd Street Minneapolis, Minnesota 55401 <i>Development of parent education and support programs for young low-income Hispanic parents in California — \$521,000 (1987)</i>		180,900	180,900	
Melmed, Arthur S. 4727 30th Street, N.W. Washington, D.C. 20008 <i>Writing on improving education through the application of cognitive science and information technology — \$16,530 (1986)</i>		6,530		6,530
Méndez Fundación Educativa, Ana G. Apartado 21345 Rio Piedras, Puerto Rico 00928 <i>Precollege mathematics and science program in Puerto Rico — \$400,000 (1988)</i>		100,800	100,800	
<i>Planning phase of a comprehensive program to enhance minority teacher preparation</i>	25,000		25,000	
Mental Health Law Project 2021 L Street, N.W. Washington, D.C. 20036 <i>Advocacy on behalf of preschool developmentally disabled children — \$225,000 (1989)</i>		100,000	100,000	
Mexican American Legal Defense and Educational Fund 634 South Spring Street Los Angeles, California 90014 <i>Program of education litigation and advocacy</i>	750,000		250,000	500,000

Recipient and/or purpose	Allocated or appropriated during year	Unpaid at beginning of year	Paid during year	Unpaid at end of year
Michigan State University East Lansing, Michigan 48824 <i>Planning research on maternal health in Zimbabwe — \$25,000 (1989)</i>		25,000	25,000	
Michigan, University of Ann Arbor, Michigan 48109 <i>Research and writing on alternate approaches to the study of conflict and cooperation — \$320,000 (1987)</i>		105,000	105,000	
<i>Coordination of external support for a project for postgraduate training in obstetrics and gynecology in Ghana — \$395,844 (1989)</i>		265,844	130,000	135,844
<i>Research and writing on militant white racism by Raphael S. Ezekiel</i>	25,000		25,000	
Midwest/Northeast Voter Registration Education Project 431 South Dearborn Chicago, Illinois 60605 <i>Research and analysis on the political implications of Hispanic population growth based on the 1990 census</i>	50,000		50,000	
Minnesota, University of Minneapolis, Minnesota 55455 <i>Study of women's health and reproductive and legal rights by the International Women's Rights Action Watch</i>	21,000		21,000	
Mississippi Office of Policy Development, Department of Finance and Administration 421 West Pascagoula Jackson, Mississippi 39203 <i>Implementation of state policy reforms in middle grade education</i>	60,000		60,000	
Morgan State University Cold Spring Lane and Hillen Road Baltimore, Maryland 21239 <i>Precollege mathematics and science program for minority students in Maryland</i>	350,000		116,660	233,340
NAACP Legal Defense and Educational Fund 99 Hudson Street New York, New York 10013 <i>Education Litigation Program</i>	555,000		185,000	370,000
NAACP Special Contribution Fund 4805 Mount Hope Drive Baltimore, Maryland 21215 <i>Program of education litigation and advocacy</i>	450,000		204,000	246,000

Recipient and/or purpose	Allocated or appropriated during year	Unpaid at beginning of year	Paid during year	Unpaid at end of year
Nairobi, University of Nairobi, Kenya <i>Analysis of health services financing in Kenya — \$150,000 (1988)</i>		100,000	100,000	
NALEO Education Fund 1114 South Lorena Los Angeles, California 90023 <i>Project to increase Hispanic communities' participation in the 1990 census — \$100,000 (1989)</i>		50,000	50,000	
National Academy of Education 108 Longfellow Hall Cambridge, Massachusetts 02138 <i>Study on future priorities in education research — \$193,000 (1989)</i>		93,000	93,000	
National Academy of Public Administration Foundation 1120 G Street, N.W. Washington, D.C. 20005 <i>Support of an organizational consortium to further the recommendations of the National Commission on the Public Service</i>	25,000		25,000	
National Academy of Sciences 2101 Constitution Avenue, N.W. Washington, D.C. 20418 <i>Committee on International Security and Arms Control — \$600,000 (1989)</i>		400,000	200,000	200,000
<i>Committee on the Contributions of Behavioral and Social Science to the Prevention of Nuclear War — \$450,000 (1989)</i>		225,000	225,000	
<i>National dialogue on improving mathematics education — \$307,000 (1989)</i>		160,000	160,000	
<i>National Forum on the Future of Children and Their Families — \$650,000 (1989)</i>		487,500	325,000	162,500
<i>Analysis of the research grants program of the Board on Science and Technology for International Development</i>	25,000		25,000	
<i>National summit on mathematics assessment</i>	197,000		98,500	98,500
<i>Networking of science and technology information systems in sub-Saharan Africa</i>	200,000		100,000	100,000
<i>Production and dissemination of a Spanish-language version of an elementary school mathematics kit for parents and children</i>	159,000		100,000	59,000

Recipient and/or purpose	Allocated or appropriated during year	Unpaid at beginning of year	Paid during year	Unpaid at end of year
<i>Support of the Institute of Medicine's study of female morbidity and mortality in Africa</i>	100,000		100,000	
National Academy of Social Insurance 505 Capitol Court, N.E. Washington, D.C. 20002 <i>Support</i>	105,000		35,000	70,000
National Action Council for Minorities in Engineering 3 West 35th Street New York, New York 10001 <i>Planning an assessment of precollege science and mathematics programs for minorities</i>	25,000		25,000	
National Association for Science, Technology, and Society 117 Willard Building University Park, Pennsylvania 16802 <i>Support</i>	100,000		60,000	40,000
National Association of State Boards of Education 1012 Cameron Street Alexandria, Virginia 22314 <i>Dissemination of a report on improving school-based programs for young children — \$340,000 (1989)</i>		85,000	85,000	
<i>Publication on state-level policies to strengthen mathematics and science education</i>	25,000		25,000	
National Board for Professional Teaching Standards 333 West Fort Street Detroit, Michigan 48226 <i>Support</i>	1,000,000		1,000,000	
National Center for Science Education 2107 Dwight Way Berkeley, California 94704 <i>Support — \$108,000 (1989)</i>	25,000	32,000	32,000	25,000
National Center on Education and the Economy 39 State Street Rochester, New York 14614 <i>Report assessing the skills of the United States work force and recommendations to promote high performance — \$250,000 (1989)</i>		65,000	65,000	
<i>International assessment of workers' skills</i>	25,000		25,000	

Recipient and/or purpose	Allocated or appropriated during year	Unpaid at beginning of year	Paid during year	Unpaid at end of year
National Charities Information Bureau 19 Union Square West New York, New York 10003 <i>Support — \$15,000 (1989)</i>		10,000	5,000	5,000
National Coalition of Hispanic Health and Human Services Organizations 1030 15th Street, N.W. Washington, D.C. 20005 <i>Research on pregnancy prevention programs for Hispanic adolescents</i>	75,000		75,000	
National Commission on Children 1111 18th Street, N.W. Washington, D.C. 20036 <i>Meetings with professional and advocacy groups</i>	25,000		25,000	
National Commission on Social Studies in the Schools 11 Dupont Circle, N.W. Washington, D.C. 20036 <i>Dissemination of the report of the curriculum task force on social studies education</i>	25,000		25,000	
National Committee for Responsive Philanthropy 2001 S Street, N.W. Washington, D.C. 20009 <i>Support — \$20,000 (1989)</i>		10,000	10,000	
National Conference of State Legislatures 1050 17th Street Denver, Colorado 80265 <i>Activities to build legislative awareness and support for science education</i>	25,000		25,000	
<i>Information and technical assistance on early childhood education and child care policy for state legislatures</i>	300,000		144,000	156,000
National Council for International Health 1701 K Street, N.W. Washington, D.C. 20006 <i>Program to enhance U.S. participation in international cooperation in health — \$150,000 (1989)</i>	300,000	75,000	75,000 150,000	150,000
National Council of Jewish Women 53 West 23rd Street New York, New York 10010 <i>Planning an assessment of the Home Instruction Program for Preschool Youngsters</i>	25,000		25,000	

Recipient and/or purpose	Allocated or appropriated during year	Unpaid at beginning of year	Paid during year	Unpaid at end of year
National Council of La Raza 810 First Street, N.E. Washington, D.C. 20002 <i>Analysis of policies and programs affecting the education of Hispanic Americans — \$225,000 (1989)</i>		187,500	75,000	112,500
National Council of Returned Peace Corps Volunteers 1319 F Street, N.W. Washington, D.C. 20004 <i>Public education project on development and development assistance</i>	25,000		25,000	
National Executive Service Corps 257 Park Avenue South New York, New York 10010 <i>Program to prepare industry and military personnel to teach math and science in public schools upon retirement — \$569,600 (1989)</i>		299,800	299,800	
National Governors' Association Center for Policy Research 444 North Capitol Street Washington, D.C. 20001 <i>Assistance to states and localities in implementing the recommendations of the Carnegie Task Force on Teaching as a Profession — \$504,000 (1989)</i>		252,000	252,000	
<i>Seminar for state policymakers on children's prevention issues and a publication on the indicators of children's well-being — \$172,000 (1989)</i>		86,000	86,000	
<i>Assistance to states and localities in implementing national goals for education in the 1990s</i>	525,140		525,140	
<i>Publication and dissemination of a report on state policies affecting pregnancy and parenting</i>	5,700		5,700	
National Head Start Association 1220 King Street Alexandria, Virginia 22314 <i>Dissemination of a report on the future of the Head Start program</i>	8,000		8,000	
National Humanities Center 7 Alexander Drive Research Triangle Park North Carolina 27709 <i>Radio programs on science, technology, and American society</i>	20,000		20,000	
National League of Cities Institute 1301 Pennsylvania Avenue, N.W. Washington, D.C. 20004 <i>Project to assist cities on child and family issues</i>	400,000		228,000	172,000

Recipient and/or purpose	Allocated or appropriated during year	Unpaid at beginning of year	Paid during year	Unpaid at end of year
National Middle School Association 4807 Evanswood Drive Columbus, Ohio 43229 <i>Directory of middle grade consultants</i>	11,350		11,350	
National Progressive Primary Health Care Committee 74 Lorne Street 4001 Durban, Republic of South Africa <i>Network of institutions and individuals concerned with primary health care in South Africa — \$167,300 (1988)</i>		83,650	83,650	
National Public Radio 2025 M Street, N.W. Washington, D.C. 20036 <i>Coverage of Third World development — \$300,000 (1985)</i>		50,000	50,000	
National Puerto Rican Coalition 1700 K Street, N.W. Washington, D.C. 20006 <i>Core public policy and public affairs programs — \$250,000 (1988)</i>		50,000	50,000	
National Urban League 500 East 62nd Street New York, New York 10021 <i>Media campaign and program development to foster responsible sexual behavior among adolescent black males — \$415,000 (1988)</i>		105,000	105,000	
<i>Center on African American adolescent male development</i>	400,000		200,000	200,000
Natural Resources Defense Council 40 West 20th Street New York, New York 10011 <i>U.S.-Soviet study of verification of naval nuclear weapons arms control agreements — \$25,000 (1989)</i>		25,000	25,000	
<i>Nuclear weapons verification and data center projects</i>	300,000		150,000	150,000
Nebraskans for Public Television 1800 North 33rd Street Lincoln, Nebraska 68583 <i>Production and promotion of television science programs for primary school children — \$250,000 (1989)</i>	200,000	100,000	100,000 175,000	25,000
New Jersey, State of, Governor's Office of Management and Planning 125 West State Street Trenton, New Jersey 08625 <i>Implementation of state policy reforms in middle grade education</i>	60,000		60,000	

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New Mexico Department of Education 300 Don Gaspar Avenue Santa Fe, New Mexico 87501 <i>Implementation of state policy reforms in middle grade education</i>	60,000		60,000	
New York Academy of Medicine 2 East 103rd Street New York, New York 10029 <i>Planning a project to strengthen biomedical research and development in the metropolitan New York region</i>	24,150		24,150	
New York Academy of Sciences 2 East 63rd Street New York, New York 10021 <i>Support by the Carnegie Commission on Science, Technology, and Government of meetings on science policy</i>	4,000		4,000	
New York, Board of Education of the City of 110 Livingston Street Brooklyn, New York 11201 <i>School Improvement Project — \$175,000 (1980)</i>		43,750	8,079 ^a 35,671	
New York, City University of New York, New York 10036 <i>Technical assistance to promote community service programs in middle grade schools</i>	40,000		40,000	
New York, City University of, Hunter College New York, New York 10021 <i>Inter-University Program for Latino Research — \$200,000 (1989)</i>		60,000	60,000	
New York Regional Association of Grantmakers 505 Eighth Avenue New York, New York 10018 <i>1990 membership support</i>	7,125		7,125	
New York State Education Department Education Building Annex Albany, New York 12234 <i>Implementation of state policy reforms in middle grade education</i>	60,000		60,000	
New York University New York, New York 10003 <i>Research on the developmental pathways of high-risk adolescents — \$400,000 (1987)</i>		130,000	80,000	50,000

Recipient and/or purpose	Allocated or appropriated during year	Unpaid at beginning of year	Paid during year	Unpaid at end of year
<i>Research and training on news media coverage of international security issues — \$250,000 (1988)</i>	350,000	125,000	125,000 87,500	262,500
Nigeria, University of Nsukka, Nigeria <i>Research on maternal mortality in Nigeria</i>	165,000		82,500	82,500
Nigerian Institute of Social and Economic Research P.M.B. 5 U.I. Post Office Ibadan, Nigeria <i>West Africa Technology Policy Research Network — \$161,400 (1989)</i>		161,400	105,722	55,678
Nonprofit Coordinating Committee of New York 121 Avenue of the Americas New York, New York 10013 <i>1990 membership support</i>	975		975	
North Carolina Department of Public Instruction 116 West Edenton Street Raleigh, North Carolina 27603 <i>Implementation of state policy reforms in middle grade education</i>	60,000		60,000	
North Carolina, University of, Chapel Hill Chapel Hill, North Carolina 27514 <i>Expansion of a precollege program in mathematics and science for minorities and girls — \$350,000 (1989)</i>		285,000	140,000	145,000
North Dakota State Department of Public Instruction State Capitol Bismarck, North Dakota 58505 <i>Implementation of state policy reforms in middle grade education</i>	60,000		60,000	
Nuclear Control Institute 1000 Connecticut Avenue, N.W. Washington, D.C. 20036 <i>Research and public education on nuclear proliferation — \$200,000 (1989)</i>		150,000	100,000	50,000
Nuclear Times 1601 Connecticut Avenue, N.W. Washington, D.C. 20009 <i>Coverage of research and analysis on the avoidance of nuclear war — \$330,000 (1989)</i>		220,000	110,000	110,000

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Obafemi Awolowo University Ile-Ife, Nigeria <i>Study of self-medication by market women in Oyo State, Nigeria</i>	9,800			9,800
OEF International 1815 H Street, N.W. Washington, D.C. 20006 <i>Commonwealth participation in a regional conference on women, law, and development</i>	25,000		25,000	
Ohio Consortium for Portfolio Development Wright State University Dayton, Ohio 45435 <i>Development of teaching portfolios by teacher education students and beginning teachers — \$20,000 (1989)</i>		20,000	20,000	
Ohio State University Columbus, Ohio 43210 <i>Conference in Bellagio, Italy, on the use of drugs and vaccines in developing countries</i>	17,250		17,250	
On Television, Ltd. 388 Broadway New York, New York 10013 <i>Program on television as an educational institution</i>	25,000		25,000	
Overseas Development Council 1717 Massachusetts Avenue, N.W. Washington, D.C. 20036 <i>Seminars for congressional staff members on international development issues</i>	200,000		200,000	
Pan American Health Organization 525 23rd Street, N.W. Washington, D.C. 20037 <i>Bi-national research, education, and training programs in maternal, adolescent, and child health in the U.S.-Mexico border region — \$700,000 (1988)</i>	400,000	100,000	100,000 400,000	
Paramedical School, Sierra Leone Bo, Sierra Leone <i>Planning research to reduce maternal mortality in the Bo district of Sierra Leone</i>	25,000		25,000	
<i>Planning research to reduce maternal mortality in the Bombali district of Sierra Leone</i>	25,000		25,000	

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Parliamentarians Global Action for Disarmament, Development, and World Reform 211 East 43rd Street New York, New York 10017 <i>Projects to strengthen multilateral security and peacekeeping institutions</i>	250,000		125,000	125,000
Pathfinder Fund 1330 Boylston Street Chestnut Hill, Massachusetts 02167 <i>Development of model education and counseling programs for pregnant adolescents in present and former Commonwealth members in sub-Saharan Africa — \$402,200 (1985)</i>		83,915	83,915	
Pennsylvania State University University Park, Pennsylvania 16802 <i>Planning research on adolescent development</i>	110,000		110,000	
People for the American Way 2000 M Street, N.W. Washington, D.C. 20036 <i>Development of programs to promote civic participation among youth</i>	25,000		25,000	
<i>Project to promote civic participation among youth</i>	350,000		100,000	250,000
Phelps-Stokes Fund 10 East 87th Street New York, New York 10128 <i>Publication and dissemination of the report of the New York State Judicial Commission on Minorities on biases in the court system</i>	25,000		25,000	
Police Executive Research Forum 2300 M Street, N.W. Washington, D.C. 20037 <i>National conference on racial and cross-cultural conflict for law enforcement executives</i>	25,000			25,000
Population Reference Bureau 777 14th Street Washington, D.C. 20005 <i>Technical assistance to community organizations on the census of 1990 and reapportionment</i>	25,000		25,000	
Princeton University Princeton, New Jersey 08544 <i>Joint U.S.-Soviet journal on scientific analyses relating to arms control, security matters, and global environmental issues — \$250,000 (1989)</i>		187,500	62,500	125,000

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<i>Project to analyze the effect of ending mandatory retirement of tenured faculty on institutions of higher education — \$100,000 (1989)</i>		75,000	75,000	
<i>Research on the feasibility of reducing United States and Soviet reliance on nuclear weapons — \$200,000 (1989)</i>		200,000	100,000	100,000
Program for Appropriate Technology in Health 4 Nickerson Street Seattle, Washington 98109 <i>Second phase of the Safe Birth Program in selected Commonwealth countries in Africa — \$250,000 (1988)</i>		32,000	32,000	
Public Education Association 39 West 32nd Street New York, New York 10001 <i>Research on high school reform in New York City</i>	25,000		25,000	
Puerto Rican Legal Defense and Education Fund 99 Hudson Street New York, New York 10013 <i>Education Rights Project — \$450,000 (1988)</i>		39,750	39,750	
Pugwash Conferences on Science and World Affairs Accademia Nazionale dei Lincei 00165 Roma, Italy <i>Support — \$150,000 (1989)</i>		75,000	75,000	
Quality Education for Minorities Network 1818 N Street, N.W. Washington, D.C. 20036 <i>Support</i>	575,000		575,000	
Radcliffe College Cambridge, Massachusetts 02138 <i>Visiting fellowships at the Mary Ingraham Bunting Institute for women from developing countries — \$199,700 (1988)</i>		130,200	130,200	
RAND Corporation 1700 Main Street Santa Monica, California 90406 <i>Research and training on managing U.S.-Soviet conflict — \$1,000,000 (1987)</i>		250,000	250,000	

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Rhode Island Department of Education 22 Hayes Street Providence, Rhode Island 02908 <i>Implementation of state policy reforms in middle grade education</i>	60,000		60,000	
Rochester, University of Rochester, New York 14642 <i>Study of the effectiveness of nurse home-visiting programs for low-income mothers and infants — \$82,000 (1988)</i>		37,000	37,000	
Rutgers University New Brunswick, New Jersey 08903 <i>Symposium on strengthening the leadership capacity of state legislatures</i>	63,200		63,200	
Sachs and Associates, Jeffrey D. 555 13th Street Washington, D.C. 20004 <i>Project on the economic transition in Poland</i>	25,000			25,000
San Francisco Education Fund 31 Geary Street San Francisco, California 94108 <i>Model program to improve science education in San Francisco public schools</i>	150,000		128,071	21,929
San Francisco Foundation 685 Market Street San Francisco, California 94105 <i>Research and writing on drug addiction by Avram Goldstein</i>	23,500		23,500	
Science Museum of Connecticut 950 Trout Brook Drive West Hartford, Connecticut 06119 <i>Program of elementary and secondary mathematics and science enrichment for minority students in Connecticut — \$300,000 (1988)</i>		100,000	75,000	25,000
Scientists' Institute for Public Information 355 Lexington Avenue New York, New York 10017 <i>Media Education Project on Child Development — \$300,000 (1988)</i>		75,000	75,000	
<i>National Security Program — \$500,000 (1989)</i>		375,000	250,000	125,000
<i>Science videotape referral service for television journalists — \$500,000 (1989)</i>		250,000	250,000	
<i>Conference for experts and the media on new national security issues</i>	185,000		110,000	75,000
<i>Media education projects on adolescent development and on minority children's health</i>	400,000		200,000	200,000

Recipient and/or purpose	Allocated or appropriated during year	Unpaid at beginning of year	Paid during year	Unpaid at end of year
Scribner, Richard A. 13114 Hathaway Drive Silver Spring, Maryland 20906 <i>Research on arms control verification issues — \$25,000 (1988)</i>		2,500	2,500	
Search for Common Ground 2005 Massachusetts Avenue Washington, D.C. 20036 <i>U.S.-Soviet task force on terrorism — \$25,000 (1989)</i>		25,000	25,000	
Sex Information and Education Council of the United States 130 West 42nd Street New York, New York 10036 <i>Project to develop and disseminate guidelines for sexuality education for children and adolescents</i>	25,000		25,000	
Sierra Leone Home Economics Association 19 Sanders Street Freetown, Sierra Leone <i>Program to introduce and evaluate appropriate health technologies to improve maternal and child health care</i>	68,000		68,000	
Smithsonian Institution Washington, D.C. 20560 <i>Production of an educational videotape program of a conference on the global environment</i>	25,000		25,000	
Social Science Research Council 605 Third Avenue New York, New York 10158 <i>Workshops for young scholars on Soviet domestic politics — \$199,500 (1989)</i>		199,500	100,000	99,500
Society of Gynaecology and Obstetrics of Nigeria College of Medicine, University of Nigeria Teaching Hospital Enugu, Nigeria <i>Safe Motherhood Conference in Abuja, Nigeria, in 1990</i>	75,000		75,000	
South Carolina Education Improvement Act Select Committee Gressetta Building Columbia, South Carolina 29202 <i>Implementation of state policy reforms in middle grade education</i>	60,000		60,000	

Recipient and/or purpose	Allocated or appropriated during year	Unpaid at beginning of year	Paid during year	Unpaid at end of year
Southeastern Consortium for Minorities in Engineering Georgia Institute of Technology Atlanta, Georgia 30332 <i>Program in engineering, science, and mathematics at predominantly minority secondary schools — \$652,000 (1989)</i>		384,200	257,400	126,800
Southern California, University of Los Angeles, California 90089 <i>Fellowships in the Center for International Journalism's Latin American Program</i>	60,000		60,000	
<i>Series of policy papers on finance issues and education reform</i>	272,300		132,800	139,500
Southern Coalition for Educational Equity P.O. Box 22904 Jackson, Mississippi 39205 <i>Guidebook on the SCEE intensive reading instruction program</i>	16,000		16,000	
Southern Regional Council 60 Walton Street, N.W. Atlanta, Georgia 30303 <i>Project on the implications of the 1990 census for redistricting — \$500,000 (1987)</i>		94,000	94,000	
Southport Institute for Policy Analysis 2425 Post Road Southport, Connecticut 06490 <i>National plan to promote adult literacy</i>	100,000		100,000	
<i>Support</i>	200,000		100,000	100,000
Southwest Voter Registration Education Project 403 East Commerce San Antonio, Texas 78205 <i>Project to increase Hispanic communities' participation in the redistricting process following the 1990 census</i>	25,000		25,000	
Stanford University Stanford, California 94305 <i>Research and training in international security and arms control — \$1,350,000 (1987)</i>	1,350,000	229,646	229,646	1,023,350
<i>Research and writing on international relations — \$250,000 (1987)</i>		52,500	52,500	
<i>Research on issues that affect minority participation in mathematics and science courses — \$200,000 (1988)</i>		25,000	25,000	

Recipient and/or purpose	Allocated or appropriated during year	Unpaid at beginning of year	Paid during year	Unpaid at end of year
<i>Development of a curriculum in human biology for the middle grades and teacher training materials — \$400,400 (1989)</i>		150,000	150,000	
<i>Research and meetings on security in the Asian-Pacific region — \$295,000 (1989)</i>		245,000	45,000	200,000
<i>Research on procedures for assessing school teachers — \$200,000 (1989)</i>	25,000	200,000	200,000 25,000	
<i>Project to improve the development, selection, and use of school textbooks in California</i>	140,900		140,900	
<i>Project to strengthen collaborative activities in science and mathematics among universities, public schools, and industry</i>	260,700		126,300	134,400
<i>Research and writing by Scott Sagan on the U.S. nuclear weapons command system and the problem of accidental or inadvertent nuclear war</i>	20,000		20,000	
<i>Support by the Carnegie Commission on Science, Technology, and Government of a seminar series on science, technology, and government</i>	10,240		10,240	
<i>Television series on statecraft</i>	500,000		500,000 ^a	
Stimson Center, Henry L. 1742 Swann Street, N.W. Washington, D.C. 20009				
<i>Study of naval arms control — \$158,200 (1989)</i>		79,100	79,100	
<i>Study of verification of compliance with multilateral arms control agreements — \$300,000 (1989)</i>		200,000	150,000	50,000
Student Pugwash USA 1638 R Street, NW Washington, D.C. 20009				
<i>Student programs on science and technology in society</i>	25,000		25,000	
Task Force on Children Out of School 95 Berkeley Street Boston, Massachusetts 02116				
<i>Analysis of a statewide initiative on reform of middle schools — \$200,000 (1988)</i>		40,000	40,000	
Teach for America P.O. Box 5114 New York, New York 10185				
<i>Support</i>	300,000		300,000	
Texas A&M University College Station, Texas 77843				
<i>National project to improve teacher education — \$600,400 (1989)</i>		250,400	250,400	

Recipient and/or purpose	Allocated or appropriated during year	Unpaid at beginning of year	Paid during year	Unpaid at end of year
Texas Education Agency 1701 North Congress Avenue Austin, Texas 78701 <i>Implementation of state policy reforms in middle grade education</i>	60,000		60,000	
Texas, University of, Austin Austin, Texas 78712 <i>Editing and publishing research papers on the education of minorities</i>	10,000		10,000	
TransAfrica Forum 545 Eighth Street, S.E. Washington, D.C. 20003 <i>Support</i>	75,000		75,000	
Triangle Coalition for Science and Technology Education 5112 Berwyn Road College Park, Maryland 20740 <i>Support</i>	325,000		159,000	166,000
21st Century Foundation c/o Johns Hopkins University Baltimore, Maryland 21210 <i>Administrative costs of establishing its offices</i>	25,000			25,000
Uganda, Ministry of Health Kampala, Uganda <i>Studies on health care financing and efficiency in Uganda — \$150,000 (1988)</i>		65,000		65,000
United Nations Association of the United States of America 485 Fifth Avenue New York, New York 10017 <i>Project on U.S.-Soviet policy dialogue on the United Nations — \$300,000 (1989)</i>		200,000	100,000	100,000
United Nations Economic Commission for Africa P.O. Box 3001 Addis Ababa, Ethiopia <i>Evaluation of institutions for science and technology policy in Africa — \$176,500 (1989)</i>		135,100	61,700	73,400
United States Committee for UNICEF 333 East 38th Street New York, New York 10016 <i>Production and dissemination of materials for the World Summit for Children</i>	25,000		25,000	

Recipient and/or purpose	Allocated or appropriated during year	Unpaid at beginning of year	Paid during year	Unpaid at end of year
United States-South Africa Leader Exchange Program 1730 M Street, N.W. Washington, D.C. 20036 <i>Alan Pifer South Africa-United States Fellowship Program — \$100,000 (1983)</i>	698 ^b 25,000	24,133	24,831 25,000	
Urban Institute 2100 M Street, N.W. Washington, D.C. 20037 <i>Public policy project to promote the well-being of children</i>	25,000 25,000		25,000 25,000	
Usmanu Danfodiyo University Sokoto, Nigeria <i>Institution strengthening</i>	20,000		17,628	2,372
<i>Research to prevent maternal morbidity and mortality in rural Nigeria</i>	135,000		135,000	
Utah State Office of Education 250 East 500 South Salt Lake City, Utah 84111 <i>Implementation of state policy reforms in middle grade education</i>	57,250		57,250	
Vermont Department of Education 120 State Street Montpelier, Vermont 05602 <i>Implementation of state policy reforms in middle grade education</i>	60,000		60,000	
Villanova University Villanova, Pennsylvania 19085 <i>Joint U.S.-Soviet project on the legislative processes of the Soviet Union and the United States</i>	301,500		101,500	200,000
Virginia Department of Education 101 North 14th Street Richmond, Virginia 23216 <i>Implementation of state policy reforms in middle grade education</i>	58,800		58,800	
Voter Education Project 604 Beckwith Street, S.W. Atlanta, Georgia 30314 <i>Planning activities commemorating the twenty-fifth anniversary of the passage of the Voting Rights Act of 1965</i>	25,000		25,000	
Washington Council on Non-Proliferation Johns Hopkins Foreign Policy Institute Washington, D.C. 20036 <i>Developing U.S.-Soviet dialogue on nonproliferation</i>	25,000		25,000	

Recipient and/or purpose	Allocated or appropriated during year	Unpaid at beginning of year	Paid during year	Unpaid at end of year
Washington, University of Seattle, Washington 98195 <i>Implementation of state policy reforms in middle grade education</i>	60,000		60,000	
West Indies, University of the Mona, Kingston 7, Jamaica <i>Strengthening educational activities in maternal and child health — \$400,000 (1989)</i>		200,000	200,000	
<i>Conference in tribute to Sir Arthur Lewis and dissemination of the conference volumes</i>	25,000		25,000	
<i>Health activities of the Women and Development Unit</i>	150,000		104,500	45,500
Western Cape, University of Private Bag X17 7535 Bellville, Republic of South Africa <i>Administration of international academic linkages — \$90,000 (1988)</i>		30,000	30,000	
WGBH Educational Foundation 125 Western Avenue Boston, Massachusetts 02134 <i>Educational television series and course on Latin America and the Caribbean — \$400,000 (1988)</i>	400,000	200,000	200,000	400,000
<i>Production, promotion, and educational outreach for a television series for early adolescents — \$400,000 (1988)</i>		50,000	50,000	
<i>— \$400,000 (1989)</i>		200,000	200,000	
<i>Production of a television series about molecular biology and accompanying educational materials and outreach — \$400,000 (1989)</i>		350,000		350,000
<i>Television series on domestic changes in the Soviet Union under Gorbachev — \$250,000 (1989)</i>		150,000	150,000	
<i>Production, promotion, and educational outreach for the fourth season of a television series for young adolescents</i>	400,000		200,000	200,000
Wilson International Center for Scholars, Woodrow Smithsonian Institution Building Washington, D.C. 20560 <i>Conference on the future of Europe</i>	25,000		25,000	
Wilson National Fellowship Foundation, Woodrow 330 Alexander Street Princeton, New Jersey 08542 <i>Institutes in mathematics and science for teachers at predominantly minority middle and secondary schools</i>	100,000		50,000	50,000

Recipient and/or purpose	Allocated or appropriated during year	Unpaid at beginning of year	Paid during year	Unpaid at end of year
Wisconsin, University of, Madison Madison, Wisconsin 53706 <i>Research, writing, and advocacy on enforcement of nuclear export controls</i>	150,000		75,000	75,000
Witwatersrand, University of the 2001 Johannesburg, Republic of South Africa <i>Health Services Development Unit</i>	75,000		75,000	
World Education Incorporated 210 Lincoln Street Boston, Massachusetts 02111 <i>North American regional meeting of a worldwide literacy conference</i>	25,000		25,000	
World Health Organization Avenue Appia 1211 Geneva 27, Switzerland <i>Research and training on biobehavioral science and mental health in developing countries — \$671,000 (1986)</i>		40,000		40,000
<i>Program to reduce the health risk of childbearing in sub-Saharan Africa and the Caribbean — \$460,000 (1989)</i>		230,000	230,000	
<i>Monitoring and evaluation of functional literacy programs for women in Zambia, Zimbabwe, Ghana, and Nigeria</i>	203,400		203,400	
Yale University New Haven, Connecticut 06520 <i>Model school improvement programs in middle schools in New Haven — \$487,000 (1988)</i>		256,000	168,500	87,500
<i>Fellowships for educationally disadvantaged South Africans in the Southern African Research Program</i>	105,000		70,000	35,000
<i>Seminars in mathematics and science for public school teachers in the Yale-New Haven Teachers Institute and for technical assistance to other universities seeking to develop collaborations</i>	285,000		187,000	98,000
<i>Study of collaboration in early childhood care and education</i>	171,700		85,850	85,850
Zambia, University of Lusaka, Zambia <i>Planning an evaluation of the maternal health programs in the Mwachisompola Health Demonstration Zone</i>	25,000		25,000	
Zimbabwe Project Trust 182 Samora Machel Avenue Harare, Zimbabwe <i>Oral and documentary history of the life of Sir Garfield Todd</i>	25,000		25,000	

Recipient and/or purpose	Allocated or appropriated during year	Unpaid at beginning of year	Paid during year	Unpaid at end of year
Zimbabwe, University of Harare, Zimbabwe				
Staff recruitment and development — \$50,000 (1982)		18,108	18,108 ^a	
Improvement of the health information system of the medical library — \$24,000 (1988)		6,667	2,495	4,172 ^c
Desktop publishing system for the faculty of science	25,000			25,000
Total	\$41,983,843	\$23,771,788	\$44,363,089	\$21,392,542
Studies and projects administered by the officers				
Carnegie Commission on Science, Technology, and Government	1,872,431		1,872,431	
Carnegie Council on Adolescent Development	876,012		876,012	
For a book on policies towards drug abuse — \$150,000 (1989)		150,000	82,950	67,050
For a study of adolescent health to be conducted in cooperation with the Office of Technology Assessment, U.S. Congress — \$275,000 (1988) — \$16,200 (1989)		181,783 16,200	177,507	4,276 16,200
For dissemination in the U.S. of the outcomes of the Second Carnegie Inquiry into Poverty and Development in Southern Africa — \$16,000 (1989)		16,000		16,000
For dissemination of Second Carnegie Inquiry and Miscellaneous Expense — \$156,437 (1989)		9,457		9,457
For dissemination of the report, Within Our Reach: Breaking the Cycle of Disadvantage, by Lisbeth B. Schorr and Daniel Schorr — \$5,000 (1988)		5,000		5,000
Telecommunication costs associated with a U.S.-Soviet project on the educational uses of computers in the early elementary school grades	25,000		20,260	4,740
Total	\$2,773,443	\$ 378,440	\$3,029,160	\$ 122,723

^aCancelled: included in total payments.

^bFunds from the appropriation are held in a separate interest-bearing account. This amount represents interest in fiscal year 1990.

^cThis represents the remaining amount due grantee for funds initially paid in full but returned to the Corporation.

Adjustments of grant appropriations

Not required: cancelled (listed above)		<u>\$549,687</u>
Refunds from grants or allocations made in prior years		
1976-77	Carnegie Council on Children	\$ 109
1977-78	Carnegie Council on Children	922
1982-83	American Association for Higher Education	2,786
1982-83	Interuniversity Communication Council	1,900
1984-85	Dan Dimancescu and James Botkin	159
1985-86	Aging Society Project	749
1985-86	National Academy of Sciences	2,466
1985-86	Teachers College, Columbia University	109
1986-87	California, University of, Los Angeles	4,767
1986-87	Carnegie Forum on Education and Economy	2,308
1986-87	Harvard University	3,829
1987-88	Pan American Health Organization	7,700
1987-88	Pan American Health Organization	15,279
1987-88	Stanford University	167
1987-88	North Carolina, University of, Chapel Hill	73
1987-88	Texas, University of, at Austin	422
1987-88	WGBH Educational Foundation	174
1988-89	American Academy of Arts and Sciences	9,687
1988-89	Johns Hopkins University	27,980
1988-89	Michigan State University	138
1988-89	National Academy of Sciences	561
1988-89	National Academy of Sciences	440
1988-89	Woodrow Wilson International Center for Scholars	3,058
1988-89	Yale University	176
		<u>\$ 85,959</u>

Report of the Secretary

The trustees held regular meetings on October 26, 1989, and January 25, April 26, and June 28, 1990. The January meeting, which was also the annual meeting of the trustees and members of the Corporation, marked the retirement of Helene L. Kaplan, chairman of the board, and Ann R. Leven. Ms. Kaplan was elected to the board in 1979 and served on the finance and administration committee and as vice chairman before being elected chairman in December 1984. Ms. Leven joined the board in 1981 and served on the finance and administration committee throughout her term.

Warren Christopher was elected chairman of the board at the January meeting. Fred M. Hechinger was reelected vice chairman. Mary Patterson McPherson and Laurence A. Tisch were reelected to four-year terms as trustees.

James P. Comer and Robert E. Rubin joined the board for four-year terms beginning at the end of the January 1990 meeting. Dr. Comer is Maurice Falk Professor of Child Psychiatry at the Yale University Child Study Center, director of the center's School Development Program, and associate dean of Yale University's School of Medicine. He holds a bachelor's degree from Indiana University, a master's degree in public health from the University of Michigan School of Public Health, and his medical doctorate from the Howard University College of Medicine. His research over two decades has demonstrated ways in which the education of disadvantaged members of minority groups may be greatly improved. He is the author of numerous articles and four books, most recent of which is *Maggie's American Dream: The Life and Times of a Black Family*.

Mr. Rubin, vice chairman of Goldman, Sachs & Company, joined the firm in 1966. He is also a member of the Regulatory Advisory Committee of the New York Stock Exchange, the Federal Reserve Bank of New York International Capital Markets Advisory Committee, and the Committee on University Resources at Harvard College. He received a bachelor's degree from Harvard College, studied economics at the London School of Economics, and received a law degree from Yale Law School.

The finance and administration committee of the board consists of not more than five trustees elected to one-year terms, as well as the chairman of the board and the president, who are members *ex officio*. Elected to the committee at the January meeting were Richard B. Fisher, Ray Marshall, Mr. Rubin, Mr. Tisch, and John C.

Whitehead. Mr. Fisher served as chairman of the committee, which held meetings during the year on October 2 and December 6, 1989, February 4, June 27, and September 26, 1990. The audit subcommittee met on January 24, 1990.

The nominating committee met on October 26, 1989, and January 25, 1990. The members of the committee were Mr. Hechinger, chairman, Eugene H. Cota-Robles, David A. Hamburg, Joshua Lederberg, and Thomas A. Troyer.

The agenda committee, an ad hoc committee of the board since 1981, had as its members Mr. Christopher, Dr. Hamburg, James Lowell Gibbs, Jr., Newton N. Minow, and Sheila E. Widnall. It met in conjunction with meetings of the full board.

During the spring of 1990, the Corporation established a new program entitled Education and Healthy Development of Children and Youth through the merger of its Education: Science, Technology, and the Economy program, chaired by E. Alden Dunham, and its program Toward Healthy Child Development: The Prevention of Damage to Children, chaired by Vivien Stewart. Ms. Stewart chairs the new program, the goals of which are to improve the overall educational achievement of American children and youth, to substantially accelerate the educational achievement of disadvantaged minority children, and to prevent the most widespread health problems of children and youth. Mr. Dunham began a six-month sabbatical in May to work on projects in the uses of technology for educational improvement.

In February, the Corporation announced a grant-making initiative to encourage implementation of educational reforms in the middle grades. The initiative, totaling approximately \$7.2 million over three years, encompasses competitive grants to states, technical assistance, consultation, evaluation, national workshops, and related grants. At the June meeting of the board of trustees, twenty-seven states received grants, which are described elsewhere in this report.

At the end of September, Adetokunbo O. Lucas left the Corporation to become professor of international health at the Harvard University School of Public Health. As chair of the Corporation's program Strengthening Human Resources in Developing Countries since July 1986, he provided a strong focus on improving maternal and child health in sub-Saharan Africa, the Caribbean, Mexico, and the U.S.-Mexico border, including developing a network of projects to reduce maternal morbidity and mortality in West Africa. Patricia L. Rosenfield, who joined the Corporation as a program officer in April 1987 and became senior program officer in October 1989, succeeded him as chair.

The Corporation's program Avoiding Nuclear War changed its name, effective October 1, 1990, to the program on Cooperative Security, to reflect its focus more accurately in light of changes in the superpower relationship in recent years.

September 1990 marked the end of one-year appointments for Herbert S. Okun as ambassador-in-residence and Graham T. Allison, Jr., as scholar-in-residence. Ambassador Okun served as executive director of the Financial Services Volunteer Corps through the end of the year and in January 1991 moved to Columbia University's School of International and Public Affairs to head a new Committee on Europe. Mr. Allison, who continues as a consultant to the Corporation's Cooperative Security program, resumed his professorship at the John F. Kennedy School of Government at Harvard University.

Two operating programs of the Corporation continued in 1990, the Carnegie Council on Adolescent Development and the Carnegie Commission on Science, Technology, and Government.

In June the Carnegie Council on Adolescent Development announced formation of a new Task Force on Youth Development and Community Programs. The task force will examine the current activities and potential contributions of America's youth organizations in an effort to expand the scope and availability of neighborhood-based services for young adolescents, particularly those living in high-risk environments. James P. Comer and Wilma Tisch cochair the task force. Mrs. Tisch, a nationally recognized leader in the voluntary sector, currently chairs the board of directors of the WNYC Foundation and is a member of the board of United Way of New York City. Jane Quinn was appointed to the Carnegie Council in February as staff director for the task force. Previously she was with Girls Incorporated (formerly the Girls Clubs of America), where she had been director of program services since 1981.

The Carnegie Commission on Science, Technology, and Government maintains offices in New York (at New York and Rockefeller universities) and Washington, D.C. Senior staff members of the commission, as well as staff members of the Corporation, are listed at the beginning of this annual report.

* * * * *

Finally, we note with sadness the deaths in 1990 of two individuals with a long and highly valued association with Carnegie Corporation. On February 19, Francis Keppel died at the age of seventy-three. The son of Frederick P. Keppel, who was president of the Corporation from 1923 to 1941, he served as a trustee from 1970 to 1979. He graduated from Harvard College in 1938 and studied sculpture in Rome for a year before returning to Harvard to take up a lifelong career in education. In 1948 he was named dean of the Harvard Graduate School of Education, where he was instrumental in devising the master's of arts in teaching program. From 1962 to 1966, he served under Presidents Kennedy and Johnson as U.S. commissioner of education. He led the drive for passage of the Elementary and Secondary Education Act of 1965 and worked for enforcement of the equal access to education provisions of the Civil Rights Act of 1964. He created the National Assessment of Educational Progress and was active as a consultant, lecturer, and researcher in educational reform until his death.

On April 11, Margaret Carnegie Miller, the only child of Andrew Carnegie, died at her home in Fairfield, Connecticut, at the age of ninety-three. She had served as an active member of the board of trustees of the Corporation from 1934 to 1973, when she was elected honorary lifetime trustee, a position she held until her death. She is survived by one of her four children, thirteen grandchildren, twenty-six great-grandchildren, and two great-great-grandchildren.

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The Carnegie philanthropies

Andrew Carnegie was born in Scotland in 1835. He came to the United States with his family in 1848 and went to work as a bobbin boy in a cotton mill. After a succession of jobs with Western Union and the Pennsylvania Railroad, he eventually resigned to establish his own business enterprises and, finally, the Carnegie Steel Company, which launched the huge steel industry in Pittsburgh. At the age of sixty-five he sold the company and devoted the rest of his life to writing, including his autobiography, and to philanthropic activities, intending to give away \$300 million. He gave away over \$350 million.

Gifts to hundreds of communities in the English-speaking world helped to make his idea of the free public library as the people's university a reality. In all, 2,509 libraries were built with Carnegie funds. His endowment of the Carnegie Institute in Pittsburgh brought important educational and cultural benefits to the community in which he made his fortune. From experience he knew the importance of science applied to commerce and industry, and he provided for technical training through the Carnegie Institute of Technology. By establishing the Carnegie Institution of Washington he helped to stimulate the growth of knowledge through providing facilities for basic research in science.

Mr. Carnegie set up the Carnegie Trust for the Universities of Scotland to assist needy students and to promote research in science, medicine, and the humanities. For the betterment of social conditions in his native town of Dunfermline, Scotland, he set up the Carnegie Dunfermline Trust. To improve the well-being of the people of Great Britain and Ireland, he established the Carnegie United Kingdom Trust.

In the United States, he created The Carnegie Foundation for the Advancement of Teaching primarily as a pension fund for college teachers and also to promote the cause of higher education. To work for the abolition of war, he established the Carnegie Endowment for International Peace. To recognize heroism in the peaceful walks of life as being as worthy as valor in battle, he created funds in the United States, the United Kingdom, and nine European countries to make awards for acts of heroism. In contributing to the construction of the Peace Palace at The Hague, the Pan American Union Building in Washington, and the Central American Court of Justice in Costa Rica, he further expressed his belief in arbitration and conciliation as substitutes for war.

In 1911, having worked steadily at his task of giving away one of the world's great fortunes, Mr. Carnegie created Carnegie Corporation of New York, a separate foundation as large as all his other trusts combined.

Each of the Carnegie agencies has its own funds and trustees and each is independently managed.

The following statements are set forth in accordance with section 6056 of the United States Internal Revenue Code, pursuant to which this annual report has been prepared:

- Carnegie Corporation of New York (employer identification number 13-1628151) is a private foundation within the meaning of section 509(a) of the Internal Revenue Code.
- The names and respective business addresses of the “foundation managers” of the Corporation are set forth in the front section of this annual report.
- No person who is a “foundation manager” with respect to the Corporation has made any contribution to the Corporation in any taxable year.
- At no time during the year did the Corporation (together with other “disqualified persons”) own more than 2 percent of the stock of any corporation or corresponding interests in partnerships or other entities.
- Pursuant to section 6104(d) of the Internal Revenue Code, a notice has been published that this annual report and the Corporation’s annual return are available for public inspection at the principal office of the Corporation. A copy of this report has been furnished to the Attorney General of the State of New York.

April 15, 1991

David A. Hamburg, President



